(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 2 August 2001 (02.08.2001)

PCT

(10) International Publication Number WO 01/55301 A2

(51)	International Pate	ent Classification7:	C	12N	60/226,681	22 August 2000 (22.08.2000)	US
(- /				•	60/227,009	23 August 2000 (23.08.2000)	US
a	International App	lication Number:	PCT/US01/0	1239	60/228,924	30 August 2000 (30.08.2000)	US
(21)	, ,				60/229,344	1 September 2000 (01.09.2000)	US
(22)	Intermedianal Filis	ig Date: 17 January	2001 (17.01.1	2001)	60/229,343	1 September 2000 (01.09.2000)	US
(22)	international Filli	ig Date: 17 January	2001 (17.01	2001)	60/229,287	1 September 2000 (01.09.2000)	US
			P.	11: . L	60/229,345	1 September 2000 (01.09.2000)	US
(25)	Filing Language:	•	E	nglish	60/229,513	5 September 2000 (05.09.2000)	US
	•		*		60/229,509	5 September 2000 (05.09.2000)	US
(26)	Publication Lange	uage:	E	nglish	60/230,438	6 September 2000 (06.09.2000)	US
		• .			60/230,437	6 September 2000 (06.09.2000)	US
(30)	Priority Data:	•			60/231,413	8 September 2000 (08.09.2000)	US
	60/179,065	31 January 2000	(31.01.2000)	US.	60/232,080	8 September 2000 (08.09.2000)	US
1	60/180,628	4 February 2000	(04.02.2000)	US	60/231,414	8 September 2000 (08.09.2000)	US
	60/184,664	24 February 2000	(24.02.2000)	US	60/231,244	8 September 2000 (08.09.2000)	US
	60/186,350	2 March 2000	(02.03.2000)	US	60/232,081	8 September 2000 (08.09.2000)	US
	60/189,874	16 March 2000	(16.03.2000)	US	60/231,242	8 September 2000 (08.09.2000)	US
	60/190,076	17 March 2000	(17.03.2000)	US	60/231,243	8 September 2000 (08.09.2000)	US
	60/198,123	18 April 2000	(18.04.2000)	US	60/231,968	12 September 2000 (12.09.2000)	US
	60/205,515	19 May 2000	(19.05.2000)	US	60/232,401	14 September 2000 (14.09.2000)	US
	60/209,467	7 June 2000	(07.06.2000)	US	60/232,399	14 September 2000 (14.09.2000)	US
	60/214,886	28 June 2000	(28.06.2000)	US	60/232,400	14 September 2000 (14.09.2000)	US
	60/215,135	30 June 2000	(30.06.2000)	US	60/232,397	14 September 2000 (14.09.2000)	US
	60/216,647	7 July 2000	(07.07.2000)	US	60/233,063	14 September 2000 (14.09.2000)	US
	60/216,880	7 July 2000	(07.07.2000)	US	60/233,064	14 September 2000 (14.09.2000)	US
	60/217,487	11 July 2000	(11.07.2000)	US	60/233,065	14 September 2000 (14.09.2000)	
	60/217,496	11 July 2000	(11.07.2000)	US	60/232,398	14 September 2000 (14.09.2000)	US
	60/218,290	14 July 2000	(14.07.2000)	US	60/234,223	21 September 2000 (21.09.2000)	US
	60/220,963	26 July 2000	(26.07.2000)	US	60/234,274	21 September 2000 (21.09.2000)	US
	60/220,964	. 26 July 2000	(26.07.2000)	US	60/234,997	25 September 2000 (25.09.2000)	US
	60/225,757	14 August 2000	(14.08.2000)	US	60/234,998	25 September 2000 (25.09.2000)	ÜS
	60/225,270	14 August 2000	(14.08.2000)	UŞ	60/235,484	26 September 2000 (26.09.2000)	US
!	60/225,447	14 August 2000		US	60/235,834	27 September 2000 (27.09.2000)	US
	60/225,267	14 August 2000	(14.08.2000)	US	60/235,836	27 September 2000 (27.09.2000)	US
i	60/225,758	14 August 2000	•	US	60/236,369	29 September 2000 (29.09.2000)	US
i	60/225,268	14 August 2000	•	US	60/236,327	29 September 2000 (29.09.2000)	US
	60/224,518	14 August 2000		US	60/236,370	29 September 2000 (29.09.2000)	US
•	60/224,519	· 14 August 2000		US	60/236,368	29 September 2000 (29.09.2000)	US
	60/225,759	14 August 2000	•		60/236,367	29 September 2000 (29.09.2000)	US
	60/225,213	14 August 2000	•		60/237,039	29 September 2000 (25.05.2000) 2 October 2000 (02.10.2000)	US
	60/225,266	14 August 2000			60/237,039	2 October 2000 (02.10.2000)	US
	60/225,214	14 August 2000			60/237,038	2 October 2000 (02.10.2000)	US
	60/226,279	18 August 2000				2 October 2000 (02.10.2000) 2 October 2000 (02.10.2000)	US
	60/226,868	22 August 2000			60/237,037	2 October 2000 (02.10.2000) 2 October 2000 (02.10.2000)	US
	60/227,182	22 August 2000			60/236,802	13 October 2000 (13.10.2000)	US
Į	00/22/,102	ZZ Mugust Zooo		0.5	60/239,937	. •	
						[Continued on next	page j

(54) Title: NUCLEIC ACIDS, PROTEINS, AND ANTIBODIES

(57) Abstract: The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.





60/239,935	13 October 2000 (13.10.2000)	US
60/241,785	20 October 2000 (20.10.2000)	US
60/241,809	20 October 2000 (20.10.2000)	US
60/240,960	20 October 2000 (20.10.2000)	US
60/241,787	20 October 2000 (20.10.2000)	US
60/241,808	20 October 2000 (20.10.2000)	US
60/241,221	20 October 2000 (20.10.2000)	US
60/241,786	20 October 2000 (20.10.2000)	US
60/241,826	20 October 2000 (20.10.2000)	US
60/244,617	1 November 2000 (01.11.2000)	US
60/246,474	8 November 2000 (08.11.2000)	US
60/246,532	8 November 2000 (08.11.2000)	US
60/246,476	8 November 2000 (08.11.2000)	US
60/246,526	8 November 2000 (08.11.2000)	US
60/246,475	8 November 2000 (08.11.2000)	US
60/246,525	8 November 2000 (08.11.2000)	US
60/246,528	8 November 2000 (08.11.2000)	US
60/246,527	8 November 2000 (08.11.2000)	US
60/246,477	8 November 2000 (08.11.2000)	US
60/246,611	8 November 2000 (08.11.2000)	US
60/246,610	8 November 2000 (08.11.2000)	US
60/246,613	8 November 2000 (08.11.2000)	US
60/246,609	8 November 2000 (08.11.2000)	US
60/246,478	8 November 2000 (08.11.2000)	US
60/246,524	8 November 2000 (08.11.2000)	US
60/246,523	8 November 2000 (08.11.2000)	US
60/249,299	17 November 2000 (17.11.2000)	US
60/249,210	17 November 2000 (17.11.2000)	US
60/249,216	17 November 2000 (17.11.2000)	US
60/249,217	17 November 2000 (17.11.2000)	US
60/249,211	17 November 2000 (17.11.2000)	US
60/249,215	17 November 2000 (17.11.2000)	US
60/249,218	17 November 2000 (17.11.2000)	US
60/249,208	17 November 2000 (17.11.2000)	US
60/249,213	17 November 2000 (17.11.2000)	US
60/249,212	17 November 2000 (17.11.2000)	ÚS
60/249,207	17 November 2000 (17.11.2000)	US
60/249,245	17 November 2000 (17.11.2000)	US
60/249,244	17 November 2000 (17.11.2000)	US
60/249,297	17 November 2000 (17.11.2000)	US
60/249,214	17 November 2000 (17.11.2000)	US
60/249,264	17 November 2000 (17.11.2000)	US
60/249,209	17 November 2000 (17.11.2000)	US
60/249,300	17 November 2000 (17.11.2000)	US
60/249,265	17 November 2000 (17.11.2000)	US
60/250,391	1 December 2000 (01.12.2000)	US
60/250,160	1 December 2000 (01.12.2000)	US
60/256,719	5 December 2000 (05.12.2000)	US
60/251,030	5 December 2000 (05.12.2000)	US
60/251,988	5 December 2000 (05.12.2000)	US
	· · · · · · · · · · · · · · · · · · ·	

60/251,479	6 December 2000 (06.12.2000)	US
60/251,869	8 December 2000 (08.12.2000)	US.
60/251,856	8 December 2000 (08.12.2000)	US
60/251,868	8 December 2000 (08.12.2000)	US
60/251,990	8 December 2000 (08.12.2000)	US
60/251,989	8 December 2000 (08.12.2000)	US
60/254,097	11 December 2000 (11.12.2000)	US
60/259,678	5 January 2001 (05.01.2001)	US

- (71) Applicant (for all designated States except US): HUMAN GENOME SCIENCES, INC. [US/US]; 9410 Key West Avenue, Rockville, MD 20850 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): ROSEN, Craig, A. [US/US]; 22400 Rolling Hill Lane, Laytonsville, MD 20882 (US). BARASH, Steven, C. [US/US]; 111 Watkins Pond Boulevard #301, Rockville, MD 20850 (US). RUBEN, Steven, M. [US/US]; 18528 Heritage Hills Drive, Olney, MD 20832 (US).
- (74) Agents: HOOVER, Kenley, K. et al.; Human Genome Sciences, Inc., 9410 Key West Avenue, Rockville, MD 20850 (US).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Nucleic Acids, Proteins, and Antibodies

- This application refers to a "Sequence Listing" that is provided only on electronic media in computer readable form pursuant to Administrative Instructions Section 801(a)(i). The Sequence Listing forms a part of this description pursuant to Rule 5.2 and Administrative Instructions Sections 801 to 806, and is hereby incorporated in its entirety.
- The Sequence Listing is provided as an electronic file (PTZ13PCT_seqList.txt, 5,421,455 bytes in size, created on January 13, 2001) on four identical compact discs (CD-R), labeled "COPY 1," "COPY 2," "COPY 3," and "CRF." The Sequence Listing complies with Annex C of the Administrative Instructions, and may be viewed, for example, on an IBM-PC machine running the MS-Windows operating system by using the V viewer software, version 2000 (see World Wide Web URL: http://www.fileviewer.com).

Field of the Invention

The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to

these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

Background of the Invention

- Enzymes comprise a large subset of proteins which function as catalysts for biochemical reactions. In fact, virtually every biochemical reaction involves the catalytic activity of an enzyme or enzymes. Most enzymes are located intracellularly, but there are a number of enzyme families which are either secreted into the extracellular space, or associated with the plasma membrane. Some enzymes, including the secreted digestive enzymes trypsin and pepsin, are produced as inactive precursors called zymogens, which require chemical modification to become active. In many cases, the catalytic activity of an enzyme depends on its association with a cofactor. Cofactors may be organic molecules, termed coenzymes, or metal ions. Many coenzymes are derived from vitamins.
- Enzymes contain two important functional units: the substrate binding site, and the catalytic site. The substrate-binding site consists of a cleft which is geometrically complementary to the shape of the preferred substrate. In addition, the amino acid residues which form the substrate binding site have noncovalent interactions with the amino acids of the complementary substrate region. The catalytic site is the portion of the molecule that facilitates the biochemical reaction once the substrate is bound to the enzyme. For a more extensive discussion of enzyme properties, see <u>Biochemistry</u>, Voet and Voet (1990); and <u>Molecular Cell Biology</u>, 2nd Edition, Darnell et al. (1990).
- The International Union of Biochemistry and Molecular Biology (IUBMB) has established enzyme nomenclature guidelines to provide an organizational framework to the growing field of enzymology (see Enzyme Nomenclature, Academic Press (1992), or the IUBMB Nomenclature Committee web site at the URL address: http://www.chem.qmw.ac.uk/iubmb/enzyme). According to the IUBMB guidelines, all enzymes can be categorized by the chemical reaction they catalyze. Documented enzymes are assigned an identifier which takes the form of "EC [A.B.C.D]", where A is one of the major functional classes of enzymes (1 through 6; see below); B and C designate increasingly specific

subgroups of enzymatic reactions; and D represents the arbitrary number of an individual member of a given category. As an example, the enzyme acetylcholinesterase is designated EC 3.1.1.7, because it is a member of the class of hydrolases (EC 3.-.-.), acting on ester bonds (EC 3.1.-.-), in the subgroup of carboxylic ester hydrolases (EC 3.1.1.-), and it is assigned number 7. Descriptions of the six major functional classes, including notable examples of each, follow below.

Oxidoreductases (EC 1.-.-.)

[7] Enzymes of this class catalyze oxidation-reduction reactions. Sub-classification is according to the substrate group oxidized (e.g., CH-OH, CH-CH, and CH-NH₂, to name but a few). A representative member of this enzyme class is long-chain-alcohol dehydrogenase (EC 1.1.1.192), which is involved in lipid metabolism. Deficient activity of this enzyme has been shown to be the primary cause of Sjogren-Larsson syndrome, an autosomal recessive disorder characterized by the presence of ichthyosis, mental retardation, and spasticity (Rizzo et al., J. Clin. Invest. 81: 738-744 (1988).

Transferases (EC 2.-.-.)

Catalytic reactions of transferases are characterized by the transfer of a chemical [8] group from a "donor" molecule to an "acceptor" molecule. Transferases can be subgrouped according to the chemical group transferred. For example, amino transferases (EC 2.6.-.-) transfer nitrogenous groups, and methyltranferases (EC 2.1.1.-) transfer methyl groups. Often the transferred group is donated by a coenzyme. A major subgroup of transferase enzymes are the protein kinases (EC 2.7.-.-), which catalyze the transfer of a phosphate group from ATP to a substrate protein. Protein kinases, such as calcium/calmodulin dependent (CaM) kinase II (EC 2.7.1.123), are known to play important roles in signal transduction pathways (Kennedy, Brain Res Brain Res Rev 26(2-3):243-57 (1998)). Other transferases are involved in metabolic processes. For example, guanidinoacetate Nmethyltransferase (GAMT; EC 2.1.1.2), converts guanidinoacetate into creatine, which is essential for the maintenance of energy reserves in the form of ATP. GAMT deficiency causes neurological impairments which may include progressive extrapyramidal movement disorders, seizures, developmental delay, and muscular dystonia (Stockler et al., Pediat. Res. 36:409-413 (1994).

Hydrolases (EC 3.-.-.)

Enzymes of this class catalyze the splitting of a substrate into two fragments by the addition of a water molecule; the water's hydroxyl group being incorporated in one fragment and the hydrogen atom in the other. Hydrolases can be subcategorized according to the chemical bond involved. For example, peptidases (EC 3.4.-.-; also known as proteases) are hydrolases which catalyze the breaking of peptide bonds. Pepsin (EC 3.4.23.1), a digestive protease which has been implicated in a number of gastrointestinal disorders, is an example of a proteolytic hydrolase enzyme (see, for example, Hirschowitz, Yale J. Biol. Med. 72(2-3):133-43 (1999), and Del Bianco et al., Dig. Liver Dis. 32(1):12-9 (2000)). Deficient activity of beta-glucocerebrosidase (EC 3.2.1.45), an O-glycosyl hydrolase, is associated with Gaucher's disease. Symptoms of Gaucher's disease include bone lesions, skin pigmentation, enlargement of the liver and spleen, and, in some cases, neurological impairments.

Lyases (EC 4.-.-)

Lyases cleave C-C, C-O, C-N, and other bonds by means other than hydrolysis or oxidation. The reverse reaction is performed by a synthetase. Histidine decarboxylase (EC 4.1.1.22) is a carboxy-lyase that converts histidine to histamine, a biogenic amine involved in a number of physiologic processes, including inflammation, allergic responses, neurotransmission, and gastric acid secretion. The phosphorus-oxygen lyase, adenylate cyclase (EC 4.6.1.1), is an intracellular enzyme which acts on ATP to form adenosine 3',5' -cyclic phosphate (cAMP), a second messenger activator of protein kinase activity.

Isomerases (EC 5.-.-.)

[11] Members of this class of enzymes catalyze geometric or structural changes within a molecule to form an isomer. Subclasses of isomerases include racemases / epimerases (EC 5.1.-.-), cis-trans- isomerases (EC 5.2.-.-), intramolecular isomerases (EC 5.3.-.-), intramolecular transferases (EC 5.4.-.-), and intramolecular lyases (EC 5.5.-.-). Protein disulfide isomerase (PDI; EC 5.3.4.1) catalyzes the intramolecular rearrangement of disulfide bonds, thus contributing to the folding of newly-synthesized proteins at the endoplasmic reticulum (see, for example, Luz and Lennarz, EXS 77:97-117 (1996)). Autoantibodies to PDI have been implicated in hepatic disorders (Nagayama et al., J Toxicol Sci Aug;19(3):163-9 (1994)).

Ligases (EC 6.-.-.)

Ligase enzymes catalyze the formation of a bond between two substrate molecules, coupled with the hydrolysis of a pyrophosphate bond in ATP or a similar triphosphate. A well characterized example of this class is DNA ligase 1 (EC 6.5.1.1), which catalyzes the joining of DNA fragments (via the formation of a phosphodiester bond) during DNA replication, recombination, and repair. Mutations in the gene encoding DNA ligase 1 have been linked to immunodeficiency disorders and hypersensitivity to DNA-damaging agents (Barnes et al., Cell, 69, 495–503 (1992)).

[13] The discovery of new human enzyme polynucleotides, the polypeptides encoded by them, and antibodies that immunospecifically bind these polypeptides, satisfies a need in the art by providing new compositions which are useful in the diagnosis, treatment, prevention and/or prognosis of a range of conditions, including but not limited to cancer, immunodeficiencies, neurological disorders, and metabolic disorders.

Summary of the Invention

The present invention relates to novel proteins. More specifically, isolated nucleic acid molecules are provided encoding novel polypeptides. Novel polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human polynucleotides and/or polypeptides, and antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to these novel polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

Detailed Description

Tables

Table 1A summarizes some of the polynucleotides encompassed by the invention [15] (including cDNA clones related to the sequences (Clone ID NO:Z), contig sequences (contig identifier (Contig ID:) and contig nucleotide sequence identifier (SEQ ID NO:X)) and further summarizes certain characteristics of these polynucleotides and the polypeptides encoded thereby. The first column provides the gene number in the application for each clone identifier. The second column provides a unique clone identifier, "Clone ID NO:Z", for a cDNA clone related to each contig sequence disclosed in Table 1A. The third column provides a unique contig identifier, "Contig ID:" for each of the contig sequences disclosed in Table 1A. The fourth column provides the sequence identifier, "SEQ ID NO:X", for each of the contig sequences disclosed in Table 1A. The fifth column, "ORF (From-To)", provides the location (i.e., nucleotide position numbers) within the polynucleotide sequence of SEQ ID NO:X that delineate the preferred open reading frame (ORF) that encodes the amino acid sequence shown in the sequence listing and referenced in Table 1A as SEQ ID NO:Y (column 6). Column 7 lists residues comprising predicted epitopes contained in the polypeptides encoded by each of the preferred ORFs (SEQ ID NO:Y). Identification of potential immunogenic regions was performed according to the method of Jameson and Wolf (CABIOS, 4; 181-186 (1988)); specifically, the Genetics Computer Group (GCG) implementation of this algorithm, embodied in the program PEPTIDESTRUCTURE (Wisconsin Package v10.0, Genetics Computer Group (GCG), Madison, Wisc.). This method returns a measure of the probability that a given residue is found on the surface of the protein. Regions where the antigenic index score is greater than 0.9 over at least 6 amino acids are indicated in Table 1A as "Predicted Epitopes". In particular embodiments, polypeptides of the invention comprise, or alternatively consist of, one, two, three, four, five or more of the predicted epitopes described in Table 1A. It will be appreciated that depending on the analytical criteria used to predict antigenic determinants, the exact address of the determinant may vary slightly. Column 8, "Tissue Distribution" shows the expression profile of tissue, cells, and/or cell line libraries which express the polynucleotides of the invention. The first number in column 8 (preceding the colon), represents the tissue/cell source identifier code corresponding to the key provided in

Table 4. Expression of these polynucleotides was not observed in the other tissues and/or cell libraries tested. For those identifier codes in which the first two letters are not "AR", the second number in column 8 (following the colon), represents the number of times a sequence corresponding to the reference polynucleotide sequence (e.g., SEQ ID NO:X) was identified in the tissue/cell source. Those tissue/cell source identifier codes in which the first two letters are "AR" designate information generated using DNA array technology. Utilizing this technology, cDNAs were amplified by PCR and then transferred, in duplicate, onto the array. Gene expression was assayed through hybridization of first strand cDNA probes to the DNA array. cDNA probes were generated from total RNA extracted from a variety of different tissues and cell lines. Probe synthesis was performed in the presence of ³³P dCTP, using oligo(dT) to prime reverse transcription. After hybridization, high stringency washing conditions were employed to remove non-specific hybrids from the array. The remaining signal, emanating from each gene target, was measured using a Phosphorimager. Gene expression was reported as Phosphor Stimulating Luminescence (PSL) which reflects the level of phosphor signal generated from the probe hybridized to each of the gene targets represented on the array. A local background signal subtraction was performed before the total signal generated from each array was used to normalize gene expression between the different hybridizations. The value presented after "[array code]:" represents the mean of the duplicate values, following background subtraction and probe normalization. One of skill in the art could routinely use this information to identify normal and/or diseased tissue(s) which show a predominant expression pattern of the corresponding polynucleotide of the invention or to identify polynucleotides which show predominant and/or specific tissue and/or cell expression. Column 9 provides the chromosomal location of polynucleotides corresponding to SEQ ID NO:X. Chromosomal location was determined by finding exact matches to EST and cDNA sequences contained in the NCBI (National Center for Biotechnology Information) UniGene database. Given a presumptive chromosomal location, disease locus association was determined by comparison with the Morbid Map, derived from Online Mendelian Inheritance in Man (Online Mendelian Inheritance in Man, OMIMTM. McKusick-Nathans Institute for Genetic Medicine, Johns Hopkins University (Baltimore, MD) and National Center for Biotechnology Information, National Library of Medicine (Bethesda, MD) 2000. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/). If the putative chromosomal location of the Query overlaps with the chromosomal location of a Morbid Map entry, an OMIM identification

number is disclosed in column 10 labeled "OMIM Disease Reference(s)". A key to the OMIM reference identification numbers is provided in Table 5.

Table 1B summarizes additional polynucleotides encompassed by the invention [16] (including cDNA clones related to the sequences (Clone ID NO:Z), contig sequences (contig identifier (Contig ID:) contig nucleotide sequence identifiers (SEQ ID NO:X)), and genomic sequences (SEQ ID NO:B). The first column provides a unique clone identifier, "Clone ID NO:Z", for a cDNA clone related to each contig sequence. The second column provides the sequence identifier, "SEQ ID NO:X", for each contig sequence. The third column provides a unique contig identifier, "Contig ID:" for each contig sequence. The fourth column, provides a BAC identifier "BAC ID NO:A" for the BAC clone referenced in the corresponding row of the table. The fifth column provides the nucleotide sequence identifier, "SEQ ID NO:B" for a fragment of the BAC clone identified in column four of the corresponding row of the table. The sixth column, "Exon From-To", provides the location (i.e., nucleotide position numbers) within the polynucleotide sequence of SEQ ID NO:B which delineate certain polynucleotides of the invention that are also exemplary members of polynucleotide sequences that encode polypeptides of the invention (e.g., polypeptides containing amino acid sequences encoded by the polynucleotide sequences delineated in column six, and fragments and variants thereof).

Table 2 summarizes homology and features of some of the polypeptides of the [17] invention. The first column provides a unique clone identifier, "Clone ID NO:Z", corresponding to a cDNA clone disclosed in Table 1A. The second column provides the unique contig identifier, "Contig ID:" corresponding to contigs in Table 1A and allowing for correlation with the information in Table 1A. The third column provides the sequence identifier, "SEQ ID NO:X", for the contig polynucleotide sequence. The fourth column provides the analysis method by which the homology/identity disclosed in the Table was determined. Comparisons were made between polypeptides encoded by the polynucleotides of the invention and either a non-redundant protein database (herein referred to as "NR"), or a database of protein families (herein referred to as "PFAM") as further described below. The fifth column provides a description of the PFAM/NR hit having a significant match to a polypeptide of the invention. Column six provides the accession number of the PFAM/NR hit disclosed in the fifth column. Column seven, "Score/Percent Identity", provides a quality score or the percent identity, of the hit disclosed in columns five and six. Columns 8 and 9, "NT From" and "NT To" respectively, delineate the polynucleotides in "SEQ ID NO:X"

that encode a polypeptide having a significant match to the PFAM/NR database as disclosed in the fifth and sixth columns. In specific embodiments polypeptides of the invention comprise, or alternatively consist of, an amino acid sequence encoded by a polynucleotide in SEQ ID NO:X as delineated in columns 8 and 9, or fragments or variants thereof.

- The PFAM identification disclosed in Table 2, columns 5 and 6, communicates [18] both the function and enzymatic activity of polypeptides corresponding to the PFAM. Extensive documentation on PFAM families and individual members of these families are maintained in publicly accessible databases (see, for example the Sanger Centre PFAM web server at http://www.sanger.ac.uk/ for a searchable PFAM database). Using this information, and included links to PROSITE, SWISSPROT, GenBank, and other sequence databases, one can routinely assign an EC (Enzyme Commission) code to the polypeptides. The EC code consists of 4 integers separated by decimal points that are used to classify enzymes, and indicate important information about cellular function and enzyme mechanism. The first digit indicates a broad group of enzyme mechanism (i.e.1=oxidoreductases, 2=transferases). The second digit indicates the type of substrate the enzyme acts upon or a broad subcategory of the enzyme type (i.e. EC 1.6 oxidoreductases acting on NADH or NADPH, or 5.1=racemases and epimerases, a subtype of EC 5=isomerases). The third digit is used to distinguish further characteristics (EC 1.1.1 oxidoreductases acting on the CH-OH group of donors with NAD or NADP as the acceptor, versus EC 1.1.2 where a cytochrome acts as the acceptor) or is simply assigned as 1 for the all entries where further clarification is unnecessary (all members of EC 4.1, carbon-carbon lyases are in group 4.1.1). The final number designates a specific enzyme, for instance, EC 4.1.1.1 pyruvate decarboxylase, or EC 1.1.1.1 alcohol dehydrogenase. Thus, if all of the source sequences for the PFAM have EC codes of the form 1.1.3.X, where X is a positive integer, the polypeptide being evaluated is likely to have a similar EC code, and, in this example, will likely be an oxidoreductase acting on the CH-OH group of donors with oxygen as an acceptor.
- [19] Furthermore, knowledge of PFAM identification and/or EC code for a polypeptide communicates enzymatic activity of the protein. This activity can routinely be confirmed using or modifying assays known in the art. Additionally, these assays may routinely be applied or modified to evaluate the enzymatic activity of fragments and variants of the invention. Further, these assays may routinely be applied or modified to

evaluate the ability of agonists or antagonists of the invention (e.g., agonistic or antagonistic antibodies) to enhance or reduce this enzymatic activity, respectively.

Table 3 provides polynucleotide sequences that may be disclaimed according to [20] certain embodiments of the invention. The first column provides a unique clone identifier. "Clone ID", for a cDNA clone related to contig sequences disclosed in Table 1A. The second column provides the sequence identifier, "SEQ ID NO:X", for contig sequences disclosed in Table 1A. The third column provides the unique contig identifier, "Contig ID:", for contigs disclosed in Table 1A. The fourth column provides a unique integer 'a' where 'a' is any integer between 1 and the final nucleotide minus 15 of SEQ ID NO:X, and the fifth column provides a unique integer 'b' where 'b' is any integer between 15 and the final nucleotide of SEQ ID NO:X, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:X, and where b is greater than or equal to a + 14. For each of the polynucleotides shown as SEQ ID NO:X, the uniquely defined integers can be substituted into the general formula of a-b, and used to describe polynucleotides which may be preferably excluded from the invention. In certain embodiments, preferably excluded from the invention are at least one, two, three, four, five, ten, or more of the polynucleotide sequence(s) having the accession number(s) disclosed in the sixth column of this Table (including for example, published sequence in connection with a particular BAC clone). In further embodiments, preferably excluded from the invention are the specific polynucleotide sequence(s) contained in the clones corresponding to at least one, two, three, four, five, ten, or more of the available material having the accession numbers identified in the sixth column of this Table (including for example, the actual sequence contained in an identified BAC clone).

Table 4 provides a key to the tissue/cell source identifier code disclosed in Table 1A, column 8. Column 1 provides the tissue/cell source identifier code disclosed in Table 1A, Column 8. Columns 2-5 provide a description of the tissue or cell source. Codes corresponding to diseased tissues are indicated in column 6 with the word "disease". The use of the word "disease" in column 6 is non-limiting. The tissue or cell source may be specific (e.g. a neoplasm), or may be disease-associated (e.g., a tissue sample from a normal portion of a diseased organ). Furthermore, tissues and/or cells lacking the "disease" designation may still be derived from sources directly or indirectly involved in a disease state or disorder, and therefore may have a further utility in that disease state or disorder. In numerous cases where the tissue/cell source is a library, column 7 identifies the vector used

to generate the library.

Table 5 provides a key to the OMIM reference identification numbers disclosed in Table 1A, column 10. OMIM reference identification numbers (Column 1) were derived from Online Mendelian Inheritance in Man (Online Mendelian Inheritance in Man, OMIM. McKusick-Nathans Institute for Genetic Medicine, Johns Hopkins University (Baltimore, MD) and National Center for Biotechnology Information, National Library of Medicine, (Bethesda, MD) 2000. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/). Column 2 provides diseases associated with the cytologic band disclosed in Table 1A, column 9, as determined using the Morbid Map database.

- [23] Table 6 summarizes ATCC Deposits, Deposit dates, and ATCC designation numbers of deposits made with the ATCC in connection with the present application.
- [24] Table 7 shows the cDNA libraries sequenced, and ATCC designation numbers and vector information relating to these cDNA libraries.
- [25] Table 8 provides a physical characterization of clones encompassed by the invention. The first column provides the unique clone identifier, "Clone ID NO:Z", for certain cDNA clones of the invention, as described in Table 1A. The second column provides the size of the cDNA insert contained in the corresponding cDNA clone.

Definitions

- [26] The following definitions are provided to facilitate understanding of certain terms used throughout this specification.
- [27] In the present invention, "isolated" refers to material removed from its original environment (e.g., the natural environment if it is naturally occurring), and thus is altered "by the hand of man" from its natural state. For example, an isolated polynucleotide could be part of a vector or a composition of matter, or could be contained within a cell, and still be "isolated" because that vector, composition of matter, or particular cell is not the original environment of the polynucleotide. The term "isolated" does not refer to genomic or cDNA libraries, whole cell total or mRNA preparations, genomic DNA preparations (including those separated by electrophoresis and transferred onto blots), sheared whole cell genomic DNA preparations or other compositions where the art demonstrates no distinguishing features of the polynucleotide/sequences of the present invention.

As used herein, a "polynucleotide" refers to a molecule having a nucleic acid [28] sequence encoding SEQ ID NO:Y or a fragment or variant thereof; a nucleic acid sequence contained in SEO ID NO:X (as described in column 3 of Table 1A) or the complement thereof; a cDNA sequence contained in Clone ID NO:Z (as described in column 2 of Table 1A and contained within a library deposited with the ATCC); a nucleotide sequence encoding the polypeptide encoded by a nucleotide sequence in SEQ ID NO:B as defined in column 6 of Table 1B or a fragment or variant thereof; or a nucleotide coding sequence in SEO ID NO:B as defined in column 6 of Table 1B or the complement thereof. For example, the polynucleotide can contain the nucleotide sequence of the full length cDNA sequence, including the 5' and 3' untranslated sequences, the coding region, as well as fragments, epitopes, domains, and variants of the nucleic acid sequence. Moreover, as used herein, a "polypeptide" refers to a molecule having an amino acid sequence encoded by a polynucleotide of the invention as broadly defined (obviously excluding poly-Phenylalanine or poly-Lysine peptide sequences which result from translation of a polyA tail of a sequence corresponding to a cDNA).

In the present invention, "SEQ ID NO:X" was often generated by overlapping [29] sequences contained in multiple clones (contig analysis). A representative clone containing all or most of the sequence for SEQ ID NO:X is deposited at Human Genome Sciences, Inc. (HGS) in a catalogued and archived library. As shown, for example, in column 2 of Table 1A, each clone is identified by a cDNA Clone ID (identifier generally referred to herein as Clone ID NO:Z). Each Clone ID is unique to an individual clone and the Clone ID is all the information needed to retrieve a given clone from the HGS library. Furthermore, certain clones disclosed in this application have been deposited with the ATCC on October 5, 2000, having the ATCC designation numbers PTA 2574 and PTA 2575; and on January 5, 2001, having the depositor reference numbers TS-1, TS-2, AC-1, and AC-2. In addition to the individual cDNA clone deposits, most of the cDNA libraries from which the clones were derived were deposited at the American Type Culture Collection (hereinafter "ATCC"). Table 7 provides a list of the deposited cDNA libraries. One can use the Clone ID NO:Z to determine the library source by reference to Tables 6 and 7. Table 7 lists the deposited cDNA libraries by name and links each library to an ATCC Deposit. Library names contain four characters, for example, "HTWE." The name of a cDNA clone (Clone ID) isolated from that library begins with the same four characters, for example "HTWEP07". As mentioned below, Table 1A correlates the Clone ID names with SEQ ID NO:X. Thus,

starting with an SEQ ID NO:X, one can use Tables 1, 6 and 7 to determine the corresponding Clone ID, which library it came from and which ATCC deposit the library is contained in. Furthermore, it is possible to retrieve a given cDNA clone from the source library by techniques known in the art and described elsewhere herein. The ATCC is located at 10801 University Boulevard, Manassas, Virginia 20110-2209, USA. The ATCC deposits were made pursuant to the terms of the Budapest Treaty on the international recognition of the deposit of microorganisms for the purposes of patent procedure.

- In specific embodiments, the polynucleotides of the invention are at least 15, at least 30, at least 50, at least 100, at least 125, at least 500, or at least 1000 continuous nucleotides but are less than or equal to 300 kb, 200 kb, 100 kb, 50 kb, 15 kb, 10 kb, 7.5kb, 5 kb, 2.5 kb, 2.0 kb, or 1 kb, in length. In a further embodiment, polynucleotides of the invention comprise a portion of the coding sequences, as disclosed herein, but do not comprise all or a portion of any intron. In another embodiment, the polynucleotides comprising coding sequences do not contain coding sequences of a genomic flanking gene (i.e., 5' or 3' to the gene of interest in the genome). In other embodiments, the polynucleotides of the invention do not contain the coding sequence of more than 1000, 500, 250, 100, 50, 25, 20, 15, 10, 5, 4, 3, 2, or 1 genomic flanking gene(s).
- [31] A "polynucleotide" of the present invention also includes those polynucleotides capable of hybridizing, under stringent hybridization conditions, to sequences contained in SEQ ID NO:X, or the complement thereof (e.g., the complement of any one, two, three, four, or more of the polynucleotide fragments described herein), the polynucleotide sequence delineated in columns 8 and 9 of Table 2 or the complement thereof, and/or cDNA sequences contained in Clone ID NO:Z (e.g., the complement of any one, two, three, four, or more of the polynucleotide fragments, or the cDNA clone within the pool of cDNA clones deposited with the ATCC, described herein), and/or the polynucleotide sequence delineated in column 6 of Table 1B or the complement thereof. "Stringent hybridization conditions" refers to an overnight incubation at 42 degree C in a solution comprising 50% formamide, 5x SSC (750 mM NaCl, 75 mM trisodium citrate), 50 mM sodium phosphate (pH 7.6), 5x Denhardt's solution, 10% dextran sulfate, and 20 μg/ml denatured, sheared salmon sperm DNA, followed by washing the filters in 0.1x SSC at about 65 degree C.
- [32] Also contemplated are nucleic acid molecules that hybridize to the polynucleotides of the present invention at lower stringency hybridization conditions. Changes in the stringency of hybridization and signal detection are primarily accomplished

through the manipulation of formamide concentration (lower percentages of formamide result in lowered stringency); salt conditions, or temperature. For example, lower stringency conditions include an overnight incubation at 37 degree C in a solution comprising 6X SSPE (20X SSPE = 3M NaCl; 0.2M NaH₂PO₄; 0.02M EDTA, pH 7.4), 0.5% SDS, 30% formamide, 100 ug/ml salmon sperm blocking DNA; followed by washes at 50 degree C with 1XSSPE, 0.1% SDS. In addition, to achieve even lower stringency, washes performed following stringent hybridization can be done at higher salt concentrations (e.g. 5X SSC).

- [33] Note that variations in the above conditions may be accomplished through the inclusion and/or substitution of alternate blocking reagents used to suppress background in hybridization experiments. Typical blocking reagents include Denhardt's reagent, BLOTTO, heparin, denatured salmon sperm DNA, and commercially available proprietary formulations. The inclusion of specific blocking reagents may require modification of the hybridization conditions described above, due to problems with compatibility.
- [34] Of course, a polynucleotide which hybridizes only to polyA+ sequences (such as any 3' terminal polyA+ tract of a cDNA shown in the sequence listing), or to a complementary stretch of T (or U) residues, would not be included in the definition of "polynucleotide," since such a polynucleotide would hybridize to any nucleic acid molecule containing a poly (A) stretch or the complement thereof (e.g., practically any double-stranded cDNA clone generated using oligo dT as a primer).
- [35] The polynucleotide of the present invention can be composed of any polyribonucleotide or polydeoxribonucleotide, which may be unmodified RNA or DNA or modified RNA or DNA. For example, polynucleotides can be composed of single- and double-stranded DNA, DNA that is a mixture of single- and double-stranded regions, single- and double-stranded RNA, and RNA that is mixture of single- and double-stranded regions, hybrid molecules comprising DNA and RNA that may be single-stranded or, more typically, double-stranded or a mixture of single- and double-stranded regions. In addition, the polynucleotide can be composed of triple-stranded regions comprising RNA or DNA or both RNA and DNA. A polynucleotide may also contain one or more modified bases or DNA or RNA backbones modified for stability or for other reasons. "Modified" bases include, for example, tritylated bases and unusual bases such as inosine. A variety of modifications can be made to DNA and RNA; thus, "polynucleotide" embraces chemically, enzymatically, or metabolically modified forms.

[36] The polypeptide of the present invention can be composed of amino acids joined to each other by peptide bonds or modified peptide bonds, i.e., peptide isosteres, and may contain amino acids other than the 20 gene-encoded amino acids. The polypeptides may be modified by either natural processes, such as posttranslational processing, or by chemical modification techniques which are well known in the art. Such modifications are well described in basic texts and in more detailed monographs, as well as in a voluminous research literature. Modifications can occur anywhere in a polypeptide, including the peptide backbone, the amino acid side-chains and the amino or carboxyl termini. It will be appreciated that the same type of modification may be present in the same or varying degrees at several sites in a given polypeptide. Also, a given polypeptide may contain many types of modifications. Polypeptides may be branched, for example, as a result of ubiquitination, and they may be cyclic, with or without branching. Cyclic, branched, and branched cyclic polypeptides may result from posttranslation natural processes or may be made by synthetic methods. Modifications include acetylation, acylation, ADPribosylation, amidation, covalent attachment of flavin, covalent attachment of a heme moiety, covalent attachment of a nucleotide or nucleotide derivative, covalent attachment of a lipid or lipid derivative, covalent attachment of phosphotidylinositol, cross-linking, cyclization, disulfide bond formation, demethylation, formation of covalent cross-links, formation of cysteine, formation of pyroglutamate, formylation, gamma-carboxylation, glycosylation, GPI anchor formation, hydroxylation, iodination, methylation, myristoylation, oxidation, pegylation, proteolytic processing, phosphorylation, prenylation, racemization, selenoylation, sulfation, transfer-RNA mediated addition of amino acids to proteins such as arginylation, and ubiquitination. (See, for instance, PROTEINS -STRUCTURE AND MOLECULAR PROPERTIES, 2nd Ed., T. E. Creighton, W. H. Freeman and Company, New York (1993); POSTTRANSLATIONAL COVALENT MODIFICATION OF PROTEINS, B. C. Johnson, Ed., Academic Press, New York, pgs. 1-12 (1983); Seifter et al., Meth. Enzymol. 182:626-646 (1990); Rattan et al., Ann. N.Y. Acad. Sci. 663:48-62 (1992)).

"SEQ ID NO:X" refers to a polynucleotide sequence described, for example, in Tables 1Aor 2, while "SEQ ID NO:Y" refers to a polypeptide sequence described in column 6 of Table 1A. SEQ ID NO:X is identified by an integer specified in column 4 of Table 1A. The polypeptide sequence SEQ ID NO:Y is a translated open reading frame (ORF) encoded

by polynucleotide SEQ ID NO:X. "Clone ID NO:Z" refers to a cDNA clone described in column 2 of Table 1A.

- [38] "A polypeptide having functional activity" refers to a polypeptide capable of displaying one or more known functional activities associated with a full-length (complete) protein. Such functional activities include, but are not limited to, biological activity, antigenicity [ability to bind (or compete with a polypeptide for binding) to an antipolypeptide antibody], immunogenicity (ability to generate antibody which binds to a specific polypeptide of the invention), ability to form multimers with polypeptides of the invention, and ability to bind to a receptor or ligand for a polypeptide.
- The PFAM accession number disclosed in Table 2, column 6 provides a link, through publicly accessible databases (see, for example the Sanger Centre PFAM web server at http://www.sanger.ac.uk/, and included links to PROSITE, SWISSPROT, GenBank, and other sequence databases), to the associated EC code, or closely-related EC codes. As described above, EC codes provide a description of the biochemical reaction(s) catalyzed by an enzyme family. Based on the associated EC code(s), one can routinely test the polypeptides of the invention for functional activity (e.g. biological activity) using or routinely modifying assays known in the art and/or assays described herein. For example, one of skill in the art may routinely assay enzyme polypeptides (including fragments and variants) of the invention for activity using assays as described in Examples 38, 39, 46, 47, 55, 60, 61, 62, and 65. Many other enzyme assays are known in the art, and may be useful for demonstrating activities of the polypeptides of the present invention.
- [40] "A polypeptide having biological activity" refers to a polypeptide exhibiting activity similar to, but not necessarily identical to, an activity of a polypeptide of the present invention, including mature forms, as measured in a particular biological assay, with or without dose dependency. In the case where dose dependency does exist, it need not be identical to that of the polypeptide, but rather substantially similar to the dose-dependence in a given activity as compared to the polypeptide of the present invention (i.e., the candidate polypeptide will exhibit greater activity or not more than about 25-fold less and, preferably, not more than about tenfold less activity, and most preferably, not more than about three-fold less activity relative to the polypeptide of the present invention).
- [41] Table 1A summarizes some of the polynucleotides encompassed by the invention (including contig sequences (SEQ ID NO:X) and clones (Clone ID NO:Z) and further

summarizes certain characteristics of these polynucleotides and the polypeptides encoded thereby.

Polynucleotides and Polypeptides of the Invention

TABLE 1A

Reference(s): Disease OMIM Cytologic Band AR061: 45, AR089: 12 L0777: 28, H0144: 12, Library code: count Tissue Distribution (see Table IV for Library Codes) .0748: 10, L0766: 9 H0620: 7, L0750: 7, 0731: 5, H0318: 4, H0510: 4, H0529: 4, \$0360: 3, H0013: 3, H0599: 3, L0770: 3, 0655: 3, L0659: 3, 30374: 3, L0751: 3, .0747: 3, L0758: 3, H0341: 2, S0282: 2, .0581: 7, L0769: 6, 0774: 6, L0749: 5, .0771: 4, L0775: 4, .0757: 4, H0556: .0768: 3, L0652: Predicted Epitopes Tyr-216 to Glu-225, Glu-166 to Gly-171 Ser-306 to Thr-312, Thr-332 to Thr-338. Gln-67 to Pro-75. NO: Y SEQ 911 (From-To) 3 - 1088ORF NO: X SEQ ID Contig HHMMC14 | 1152250 Ä Clone ID NO: Z Gene No:

					 .	_					_									-			_			-				-
								-													·. ·						0			
			· 					<u> </u>		·-								 -									<u>.</u>			
										,																	,			
						13																	T.		,					
H0246: 1, T0003: 1,	H0373: 1, H0355: 1,	S6028: 1, H0266: 1,	S0334: 1, H0424: 1,		0.0455: 1, H0135: 1,		H0087: 1, H0268: 1,	H0413: 1, H0623: 1,	C0351: 1, T0042: 1,	S0438: 1, H0130: 1,	H0646: 1, S0144: 1,	S0142: 1, L0762: 1,	ı,	L0374: 1, L0764: 1,	7	L0806: 1, L0776: 1,	L0657: 1, L0383: 1,	L0382: 1, L0647: 1,		Ę,	_	٣í	H0672: 1, S0044: 1,	H0134: 1, H0478: 1,	L0754: 1, L0756: 1,	L0779: 1, L0752: 1,	L0753: 1, L0755: 1,	L0759: 1, L0608: 1,	H0668: 1, H0665: 1 and	HUSU6: 1.
=	.)=1.	<u>, , , , , , , , , , , , , , , , , , , </u>	<u> </u>	<u>, 124</u>	 -					<u> </u>		<u></u>	<u>. = </u>						. 		_			<u> </u>						-
							•																							
			ř.		<u> </u>		•	<u></u>									•							-			•			_
				-										-								- 🖈			V.1				-	
		8	•			e X e	,							,		-										,				
	•						-									-													1)1	
						•					*																			
					<u>. </u>									<u> </u>			· 		<u> </u>			*		-			_	,		

								<u></u>				_			
								00						,	, -
	AR061: 3, AR089: 2 S0001: 1, S0390: 1, S0028: 1 and L0592: 1.		H0318: 3, H0656: 2, H0620: 2, S0420: 1, S0045: 1, H0393: 1,	H0357: 1, S0346: 1, H0581: 1, S6028: 1,	H0539: 1, L0/48: 1, L0750: 1 and L0777: 1.		AR089: 1, AR061: 1	S0028: 12, S0045: 5, S0144: 4, S0001: 3,	S0044: 3, S0031: 3,	S0282: 2, H0597: 2, H0617: 2, S0428: 2	S0390: 2, S0037: 2,	S0260: 2, H0624: 1,	H0171: 1, H0381: 1,	H0346: 1, S0132: 1,	S0300: 1, S0278: 1, H0318: 1, H0204: 1,
Gln-61 to Pro-69, Glu-160 to Gly-165, Tyr-210 to Glu-219, Ser-300 to Thr-306, Thr-326 to Thr-332.			His-29 to Cys-37, Glu-40 to Pro-49, Glu-140 to Gly-145.			His-29 to Cys-37, Glu-40 to Pro-49.	Ser-1 to Asp-12,	Gln-103 to Cys-108, Ser-173 to Lys-182.							
1552	912	1553	913			1554	914				•				
3 - 1070	674 - 3	1 - 672	2 - 595			2-676	520 - 1158				,				,
652	12	653	13			654	14					•			
969371	1184946	752382	1082023	-		868780	1152254	· · ·							
	HSLEQ79		HUCME08		•		HNGOW33								,
>	2		6				4				-				

																				•					
																		٠							
	2										- 20.					·				-	····				
																	-		. •						
			•	•		•																			-
		5	10,															9		-	<u>·</u>		•		
S0050: 1, H0271: 1, H0416: 1, H0644: 1, H0181: 1, S0036: 1, H0359: 1, S0150: 1, H0144: 1 and S0146: 1		R089:	H0585: 37, H0141: 10,	4: 5,	35: 2,	3:2,	4: 1,	55: 1,	10: 1,	2: 1,	3: 1,	6: 1,	8: 1,	59: 1,	50: 1,	0777: 1 and L0758:		:089:	L0659: 4, L0758: 4,	0:2,	0: 2,	5: 1,	55: 1,	17:1,	15: 1,
S0050: 1, H0271: 1 H0416: 1, H0644: H0181: 1, S0036: 1 H0359: 1, S0150: 1 H0144: 1 and S014		AR061: 10, AR089:	37, H	.0809: 6, L0794: 5,	.0752: 3, H0135: 2	H0494: 2, L0803:	, S6024:	, H0255:	, H0510:	, L0772:	, L0773:	, L0806:	, L0788:	1, H0659:	H0187: 1, L0750: 1,	and I		AR061: 9, AR089:	4, LO7	, S036	L0775: 2, L0750: 2,	, H029	1, H0255	, L0717:	, H0015:
050: 1 416: 1 181: 1 359: 1 144: 1		:061:	0585:	809: 6	752: 3	494: 2	.0749: 2,	S0212: 1	30356: 1	.0761: 1	0800: 1	.0766: 1	.0782: 1	T0144: 1	187: 1	777: 1		:061:	0659:	777:3	775:2	731:2	S0218: 1	H0402: 1	H0411: 1
SO H CO H		AR	<u> </u>	2	<u>2</u>	邑		<u>(/)</u>	<u> </u>	2	<u> </u>	ì	<u>2</u>	邑	出	ú		A.	<u> </u>	<u>입</u>	<u>2</u>	<u>임</u>	<u>8</u>	邑	뵈
×	1.		.30,	46,	-100,	y-130,	Arg-139 to Pro-144,	Lys-179 to Met-187.				٠					19.	-25.							
	Arg-1	Leu-6	o Arg-	o Lys-	o Asp	15 G	to Pro	to Me					٠.	.• :			o Pro-	o Arg-							
	Ser-1 to Arg-11	Pro-1 to Leu-6,	His-25 to Arg-30,	Lys-40 to Lys-46,	Thr-95 to Asp-100,	Gly-125 to Gly-130,	g-139	rs-179									His-14 to Pro-19.	Ala-20 to Arg-25							
,		Pr	<u>田</u>	<u>江</u>	<u> </u>	<u>ত</u>	¥	<u>ন</u>						 ;				Y							
	1555	915															1556	916			•				
	1320	896															- 967	25							*
	268 -	153 -			•				. —								455 -	2 - 325		-	:			•	
	655	15															959	16		-					
	957351	1103896									-						923731	949061							
	6																	6	-						
	-	HT4GD03																HAQBZ89	i						
	•	5	- ,-													-		9							

		-	I	
*				
			-	121
-				
		·		
H0030: 1, H0644: 1, H0673: 1, H0087: 1, L0770: 1, L0769: 1, L0646: 1, L0761: 1, L0766: 1, L0387: 1, L0766: 1, L0776: 1, H0655: 1, L0789: 1, H0683: 1, S0027: 1, L0748: 1, L0779: 1 and L0757: 1.	AR089: 12, AR061: 7 H0583: 1, H0675: 1 and H0457: 1.	AR089: 0, AR061: 0 L0748: 6, L0749: 6, L0803: 3, L0774: 3, L0775: 3, H0574: 1, H0632: 1, H0013: 1, L0789: 1, L0790: 1, H0144: 1 and L0581: 1.	AR061: 11, AR089: 3 L0748: 3, H0144: 2, H0632: 1 and L0581: 1.	AR061: 6, AR089: 3 S0010: 4, S0222: 3, H0455: 2, L0803: 2, L0439: 2, L0745: 2, S0282: 1, S0400: 1, H0456: 1, H0441: 1,
H00 100 100 100 100 100 100	AR H(and	AR 108 107 107 107 107	AR CO	AR S0 104 H04 H04
	Gly-8 to Ile-13, Glu-141 to His-146, Glu-186 to Glu-195, Asp-213 to Asn-218.	Glu-69 to Gln-76.		Pro-36 to Lys-46, Pro-56 to Ala-68, Ala-85 to Arg-90, Tyr-191 to Asn-198, Gly-219 to Val-224, Leu-232 to Lys-238,
	917	918	919	920
	139 - 921	1 - 546	3 - 563	1613 - 462
•	17	18	19	20
	949062	927532	949080	946170
	HCCCC81	HE8PW83	HE9QQ22	HFPFB39
	7	∞ .	6	10

S0346: 1, H0509: 1, L0769: 1, L0438: 1, L0756: 1 and S0106: 1.	AR061: 0, AR089: 0 S0045: 6, H0255: 5, S0028: 4, S0031: 2, S0260: 2, H0341: 1, S0278: 1, H0333: 1, H0250: 1, S0050: 1	H0271: 1, H0100: 1, S0216: 1, S0044: 1 and S0390: 1.		AR061: 6, AR089: 2 H0052: 3, H0457: 3, H0618: 2, H0622: 2, L0770: 2, L0438: 2, L0439: 2, H0257: 1, H0471: 1, H0428: 1, H0135: 1, H0144: 1, H0519: 1, H0521: 1, L0741: 1, L0756: 1 and	
His-260 to Ala-266.			Ala-324 to Phe-332, Arg-336 to Thr-343, Pro-373 to Arg-384, Lys-424 to Asp-431.	Ala-30 to Lys-45, Ala-71 to Ala-85, Gly-112 to Asn-117, Asn-131 to Gly-140, Ser-143 to Ala-148, Leu-230 to Val-235, Gly-301 to Asn-312.	Ala-28 to Lys-43, Ala-69 to Ala-83, Gly-110 to Asn-115, Asn-129 to Gly-138,
	921		1557	922	1558
,	272 - 2143		210 - 1847	2 - 994	1 - 1371
	21	•	657	22	658
	1151680		974784	1181748	943384
	HSDJI44	ų.		HE9DG38	
	-			12	

WO 01/55301

							ž			•			19413.3-413.4 113900,	126340,	126391,	130410,	134790,	138570,	160900,	173850,	191044,	258501,	600040,	600138,	602225,
													19q1												
	AR061: 41, AR089: 30 H0014: 2, S0028: 1 and S0031: 1.		AR089: 2, AR061: 1 L0439: 3, S0222: 2,	H0543: 2, S0360: 1,	H0622: 1, H0063: 1,	H0477: 1, T0042: 1,	L0369: 1, L0771: 1,	L0662: 1, L0659: 1, L0809: 1 and L0786: 1.					AR089: 389, AR061:	120				_			,				-
Ser-141 to Ala-146.			Leu-71 to Val-76, Glv-142 to Asn-153,	Asp-180 to Arg-188,	Ser-202 to Asn-212,	His-244 to Pro-251,	Arg-275 to Ala-280.		Leu-71 to Val-76,	Gly-142 to Asn-153.	Thr-15 to Tyr-20,	Ser-54 to Leu-63.	Leu-1 to Tyr-10.				•			•	-		,		
	923	1559	924						1560		1561		925												
	1 - 420	1 - 420	112 - 1011						112 - 627		718 - 401		176 - 397		٠				0				:	<u>.</u>	
	23	629	24						099		661		25												
	1024746	761143	1181747						943385		972980		668405												
	· HGBAT24		HTDAF92				4						HAPSI19					*							
	13		14										15		-										

602225	·			
9			,	
	AR061: 197, AR089: 100	AR089: 2, AR061: 1 L0439: 4, L0105: 2, H0271: 2, L0637: 2, L0653: 2, H0519: 2, S0330: 2, H0431: 1, H0052: 1, L0471: 1, H0375: 1, L0763: 1, L0794: 1, L0803: 1, L0774: 1, L0806: 1, L0526: 1, L0664: 1 and H0648: 1.	AR061: 2, AR089: 2 S0358: 2, L0657: 1 and L0601: 1.	AR061: 1, AR089: 1 L0748: 6, H0013: 3, L0794: 3, L0438: 3, L0747: 3, L0731: 3, L0005: 2, S0360: 2, H0494: 2, L0769: 2, L0766: 2, L0803: 2, L0655: 2, L0756: 2,
	Leu-48 to Gln-54.	Pro-45 to Ser-53, Ala-55 to Ala-63, Asp-130 to Leu-136.	Pro-1 to Glu-10, His-60 to Arg-76, Pro-79 to Arg-85, Ala-95 to Ile-101, Glu-124 to Glu-130, Lys-151 to Arg-158.	Arg-1 to Gly-7, Pro-19 to Cys-27, Leu-61 to Ala-72, Ser-90 to Ser-96, Thr-126 to Ser-143, Glu-167 to Gln-176, Ile-185 to Ser-193, Phe-249 to Phe-256,
	926	927	928	929
	185 - 442	33 - 938	51 - 524	2 - 1339
	26	27	28	29
	666268	954852	954849	1193068
	HADTU18	HNTEF53	HWLLB11	HCRQK86
	16	17	18	

<u> </u>						 					-				
·									•						
						=		-					<u> </u>		
								•							•
, (1)					•										
•					`^			•			•		and		
624: 1 556: 1 116: 1 0484: 1	1, S0418: 1 , S0356: 1 1, H0580: 1	, H0392: 1 1, H0052:	H0033: 1 H0617: 1	1, H0272: 1 1, S0038: 1	H0509: 1	20420. I L0646: 1	L0662: 1	L0636: 1 L0367: 1	L0666: 1	H0682:]	611: 1	L0777: 1 L0753: 1	L0601: 1 and)	
: 2, HO: 1, HC: 1, SO: 1, HC: 1, HC		1, H0 1, H(: 1, H(:		î Hî			1,10	: 1, H(1, 10	1,1	1, LO	- :	
L0758: 2, H0624: 1 H0170: 1, H0556: 1 H0294: 1, S0116: 1 H0341: 1, H0484: 1	H0638: 1, S0418: S0420: 1, S0356: H0637: 1, H0580:	L0717: 1, H0392: H0618: 1, H0052:	H0622: 1 H0553: 1	H0264: H0413:	H0100: 1,	50422: L0639:	0800: 1	0378: 1,	.0789: 1,	H0144: 1,	H0436: 1, L0611:	.0752: 1,	.0608: 1,	S0276: 1	
						<u> </u>									0
Ser-27 Lys-3(Arg-32 Gly-35	Ser-41					÷									ys-22, yla-67, er-91,
Ala-260 to Ser-271, Tyr-298 to Lys-304, Ser-311 to Arg-322, Ser-346 to Gly-356,	Glu-400 to Ser-411					•								• :	Pro-14 to Cys-22, Leu-56 to Ala-67, Ser-85 to Ser-91,
Ala-2 Tyr-2 Ser-3 Ser-3	Glu-7														Pro-1 Leu-: Ser-8
															1562
	<u></u> -	-				· ,,		·				-		-	
× -					•										- 1324
								/							2
·															662
· ·						-		*						-	918014
	ì <u> </u>		ò		<u>.</u>									3	918
- -	,ŧ														
													•		
													•		
											_				

				.						-			8		-		-			•			
				٠																			
		-	•	-,				-1								_				-			_
						•																	
·						œ																	
		0	ري			۰,			•	•	•			_	_	_					and	·	. 1
		1, AR089:	L0766: 3, H0341: 2,	H0599: 2, H0457: 2,	146: 2	445:2	519: 1	455: 1	486: 1	010:1	544: 1	, T0042: 1	H0359: 1	L0528: 1	543: 1	435: 1	H0518: 1	L0439: 1	753: 1	L0594: 1	H0542: 1, H0423: 1		1, AR089:
		1, A	3, H(2, H0	H0169: 2, S0146: 2	H0444: 2, H0445:	2, H0619:		1, H0486:	1, S0010:			1, H0	7	<u>_</u>	1, H0435:	1,	1, L04	_		1, H0	1.	
•		AR061:	.0766	599:	169:)444:	0592: 2	S0222:]	H0592: 1	H0013:	30665:	L0471: 1	H0560: 1,	.0662:	.0529:	,0438: 1	H0660:	S0044:	.0745:	S0260: 1	542:	H0422:	AR061:
		₹.	-	Ĭ	Ħ	Ħ	ם	<u>8</u>	Ħ	耳	S0	ם	茧	딜	크	ם	Ħ		ם	<u>8</u>	Ħ)H	Υ
Glu-162 to Gln-171, Ile-180 to Ser-188, Phe-244 to Phe-251, Ala-255 to Ser-266, Tyr-293 to Lys-299, Ser-306 to Arg-317,	7-351, r-406.	.19,	.35,	.57,	87,	-111.												-					-27.
Glu-162 to Gln-171 Ile-180 to Ser-188, Phe-244 to Phe-251 Ala-255 to Ser-266, Tyr-293 to Lys-299, Ser-306 to Arg-317,	Ser-341 to Gly-351, Glu-395 to Ser-406	Ser-13 to Arg-19,	o Val	Pro-37 to Gly-57,	Ser-81 to Pro-87,	Ile-102 to Arg-111	1													٠.			Phe-21 to Lys-27.
u-162 -180 t e-244 a-255 r-293 r-306	r-341 u-395	r-13 te	u-28 t	5-37 to	r-81 to	-102 t																	e-21 t
S TA P E	<u>8</u> 5	Se	<u>ل</u>	Pr	Se	ne		-,-			_		_			—							Ph
	•	930																					931
		449				,																	2
·		\mathbb{E}											٠		•								53 - 625
		33]											·									-	5.
		30																	٠				31
,		535							,_ -														330
		933635																					926930
)T88											•										F11
	•	HOCOT88																					HELEF11
	· · · · · · · · · · · · · · · · · · ·	├									·	-											
		20					•																21

						-												•	-	*									_
																												•	
S0045: 1 and H0457: 1.	AR061: 6, AR089: 5	L0770: 4, L0789: 3,	L0439: 3, L0750: 3,	L0641: 2, L0747: 2,	L0758: 2, S0040: 1,	H0575: 1, T0010: 1,	H0087: 1, S0422: 1,	L0803: 1, L0375: 1,	L0776: 1, L0659: 1,	L0783: 1, H0144: 1,	L0352: 1, H0684: 1,	H0660: 1, S0027: 1,	L0777: 1 and H0445: 1.			AR061: 2, AR089: 1	H0229: 1, H0590: 1,	S0049: 1, H0014: 1,	H0560: 1, L0439: 1 and	H0543: 1.	AR061: 4, AR089: 1	L0758: 7, L0768: 2,	H0616: 1 and L0151: 1.		AR061: 1, AR089: 1	H0575: 2, L0754: 2,	H0599: 1, T0048: 1,	L0163: 1, H0051: 1, H0188: 1, H0379: 1.	
	Arg-9 to Gln-17,	Ile-33 to Asn-39,	Gln-93 to Ser-104,	Asp-141 to Leu-155,	Ser-224 to Asn-234,	Asn-243 to Lys-248,	Ser-308 to Gln-320,	Thr-350 to Glu-357,	Ser-384 to Thr-390,	Asp-435 to Ser-447,	Ala-480 to Lys-487,	Lys-496 to Leu-508,	Ser-519 to Val-528,	Ser-533 to Gln-541.	Arg-9 to Leu-15.	Val-10 to Gly-16,	Met-19 to Val-34.		•		Tyr-1 to Lys-8,	Phe-19 to Ser-24,	Thr-28 to Ser-34,	Pro-54 to Trp-70.	Gln-43 to Thr-58,	Asn-74 to His-79,	Gly-109 to Trp-114,	Asp-136 to Phe-145.	
	932							*							1563	933		:			934		٠	٠	935				
	199 - 1821									7			,	,	199 - 909	2 - 760					839 - 78	,			2 - 562				
	32														. 663	33					34				35				
	1204714														762606	910078					948475		•	-	1227205				
	HOUGD29															HSIGN57			•		HTEPE35				HUFDB74				
	22															23					24				25				-

	· · ·																								
· · · · · · · · · · · · · · · · · · ·	-		-,-	· - <u>.</u>		,																			
																									•
										_			Ţ,												
L0438: 1, H0670: 1, H0672: 1, L0439: 1, L0747: 1, S0260: 1, L0591: 1 and H0506: 1.			AR089: 8, AR061: 4	L0748: 35, L0747: 15,	10052: 11, L0766: 11,	.0439: 10, L0740: 9,	.0595: 9, H0556: 8,	10599: 6, S0010: 6,	30418: 5, H0318: 5,	H0050: 5, H0673: 5,	HO591: 5, L0770: 5,	.0593: 5, H0265: 4,	30046: 4, H0431: 4,	H0574: 4, H0013: 4,	10083: 4, S0022: 4,	.0776: 4, H0144: 4,	.0746: 4, L0750: 4,	.0777: 4, L0752: 4,	.0731: 4, L0604: 4,	.0603: 4, S0420: 3,	S0354: 3, H0261: 3,	H0331: 3, H0156: 3,	H0046: 3, H0373: 3,	H0266: 3, H0090: 3,	H0551: 3, H0413: 3,
PEHH		4:	₹.		豆		<u>, 1</u> 2	프	S	프	<u> </u>	ㅂ	S	正	프	ㅂ	브	<u> </u>	ㅂ	<u> </u>	S	Щ.	连	斑	프
	Gln-43 to Thr-58, Asn-74 to His-79,	Gly-109 to Trp-114	Asp-1 to Ala-6,	Pro-25 to Pro-30.)			• •						•	. `				-						-
	1564		936									in the second													
	2 - 412		3 - 581							٠				y.											
	664		36			. , .																			
	901451		1229908															-							
·	-		HBXAB33					-																	
			26						. 																

				_																								
														-														
			,							·.							•											
		•			•																							
							•		-			-				,		;.		•						•		
	: 1, 2: 1,	5: 1; 5: 1;	. 1.	5: 1,	3: 1,	9: 1,	2: 1,	0: 1,	5: 1,	1,	4: 1,	8: 1,	1: 1,	1: 1,	l: 1,	4: 1,	9: 1,	5: 1,	1:1,	5: 1,	7: 1,	4: 1,	3: 1,	4: 1,	0: 1,): 1,	5: 1,	
1, S0040:	1, S0001:	1, S0356:	, S0045:	1, S6026:	1, S0278:	1, H0409:	1, H0632:		1, H0575:		1, H0544:			, L0163:	1, S0051:	1, S0214:	1, H0039:	1, T0006:	1, H0181:	, L0455:	, T0067:	1, H0264:	1, H0623:		1, S015	, S0210:	, S0426:	1. L0761:
H0624: S0114: 1	H0341:	H0125:	30360: 1	H0619:	H0351:	H0391:	H0587:	H0244:	H0069:	S0346: 1	H0597:	H0009:	H0123: 1	S0362: 1	N0007:	H0290:	H0428:	H0622:	H0644:	S0364: 1	S0036: 1	H0380:	H0488:	H0059: 1,	H0625: 1, S0150:	S0344: 1	S0002: 1	1.0371:1
<u> </u>			<u> </u>	<u> </u>	.==.					<u> U</u>	. ==	. ==.	_===	<u> </u>		<u> </u>	<u>.</u>	<u></u>	<u> </u>	<u> </u>	<u> </u>				<u></u>	<u> </u>	,	_
•																											٠	
						8																						•
			•	1	<u>.</u>											•		<u>. </u>			•			-,*-,**				
				-		-																•		<u> </u>	 .	<u>-</u>		4
	•																											
													,							· ····								
					-				·	-																		
					*													-						-				
						_			-	.1	40		<u>-</u>								-,	·						
				٠																								

·						•				•
			•							
· · · · · · · · · · · · · · · · · · ·						 .			<u>-</u>	·
	• .			· :			•			
-1	L0755: 1, S0031: 1, L0608: 1, L0366: 1, S0011: 1 and S0026: 1.			. •	AR061: 3, AR089: 1	H0617: 4, S0212: 2, S0360: 2, S0144: 2	.0803: 2, H0587: 1,	H0013: 1, H0046: 1,	30422: 1, H0529: 1,	L0774: 1, L0809: 1, L0790: 1, L0791: 1,
<u> </u>		Lys-70 to Met-78, Tyr-85 to Lys-91, Gin-195 to Cys-205,	Pro-234 to Lys-245, Gly-270 to Asp-275,	Asp-315 to Ser-324, Pro-352 to Gin-357, Len-380 to Tm-389.		Arg-56 to Thr-63, Tyr-84 to Asm-89		<u>щ</u> ,	<u> </u>	HH
	1	1565			937				-	
		2424 - 1081			677 - 1423				, .	
	**				37					
		957228			1198479				- ;	
	•		٠		HMABF84					
					27					· ——

					*		•							-			· ·									602014	
L0748: 1 and L0747: 1.	Ţ	AR061: 8, AR089: 4	H0424: 1 and L0595:	1.							AR089: 0, AR061: 0					AR089: 1, AR061: 0 H0598: 1, S0028: 1 and	S0260: 1.		AR061: 10, AR089: 5	H0264: 2, H0556: 1,	S0366: 1, S3012: 1 and	L0485: 1.		•	•	AR061: 23, AR089: 15 9q12 L0777: 28, H0257: 19,	
	Arg-14 to Thr-21, Tyr-42 to Asp-47.	Gly-1 to Gln-11,	Ser-24 to Cys-33,	Thr-37 to Gly-46,	Thr-51 to Thr-63.	Pro-10 to Pro-17,	Cys-41 to Pro-50,	Asn-64 to Arg-73,	Ser-81 to Arg-87,	Glu-93 to Pro-100.	Leu-29 to Gly-40,	Tyr-93 to Ile-100.	Tyr-28 to Val-37,	Gln-39 to Met-44,	Leu-52 to Asp-60.				Pro-48 to Gly-53,	Pro-88 to Ser-94,	Gly-103 to Ser-108,	Pro-141 to Gln-150.	Pro-48 to Gly-53,	Pro-88 to Ser-94,	Gly-103 to Gly-111.	Ser-39 to Thr-45, Thr-65 to Thr-71.	
	1566	938	٠			1567					939		1568			940		1569	941			-	1570			942	
	1 - 465	712 - 245	٠.			2 - 679					570 - 1		1 - 381			2 - 313		3 - 371	2 - 565				2 - 424			322 - 606	
	999	38				<i>L</i> 99		•			39		899			40		699	41	•			0/9			42	
	944629	1150836		•		936688					1197407		506582			1228138		656370	1104951				958447			1032585	7
		HPTVF17							-		HSDIC55					HSDIL35		,	HTXSM05				•			HYAAH23	
		28									29					30			31							32	

				**								•				·				_ <u>.</u> .	¢ .				1				
																	-				:								
																		•									•		
							•						*					····									٠.		_
												•																	
																							•						
				.		-			,					1	! !					_	<u> </u>			· -					
. 10 ,	~	Ś	ر در	٠.	۰,۰	عر,	. حا ـ	ω,	່ຕົ	ຕົ	ຕ໌	· ~~~	· ~~	~ <u>`</u>	~.`	~ <u>`</u>	ر ک	~'	લં	~ຳ	رث	2,	2,	ج	2,	ລໂ	ຸດ:	٠î	2
10144: 12, L0748: .0766: 9, H0620: 7	750: 7	559: (L0749: (771:	L0731: 5,	318:	775: 4	H0556: 3	S0360: 3, H0256: 3	H0013: 3, H0599: 3	059:	.0770: 3, L0662: 3,	L0652: 3	L0659: 3	S0374: 3	758:	H0341:	S0282: 2, H0661: 2,	H0662: 2, H0125: 2,	S0358: 2, H0637: 2,	S0278: 2, H0024: 2,	H0373: 2, H0188: 2,	H0292: 2, H0031: 2,	S0036: 2, H0264: 2	H0494: 2, H0509: 2,	S0144: 2, S0344: 2,	L0761: 2,	L0663: 2,	50126
12, L), H0	7, L0750:	7, H0559:	6, LO	5, L0771:	5, 10,	.0757: 5, H0318:	H0510: 4, L0775:	t, H0	3, HO	3, HO	H0266: 3, H0059:	3,10	3, LO		3, SO	3, L0758:	3, HO	2, HO	2, H0	2, HO	2, HO	2, H0	2, H0	2, HO	2, H0	2, SO	2, 10,	2, 10	
H0144: 12, L0748: 10, L0766: 9, H0620: 7,	.0769: 7	0581:7	.0774: (H0529:	,0751: 5,	757: 5	510:	.0744: 4,	360: 3	013:	266:	770: 3	L0768: 3	.0655: 3,	.0666:	L0747: 2	.0595: 3	282: 2	662:	358: 2	278: 2	373:	292:	336:1	494:	144: 2	.0369: 2,	,0807: 2,	H0547.2
品品	Ö	<u>3</u>	2	田	ć	9	E E	í	80	H	出	Š	Ú	Š	<u>n</u>	<u>2</u>	ÿ	803	H	80.	<u>S</u>	욢	出	<u>S</u>	H	20	<u>1</u>	ñ	H
									•																				
·				٠		,															•								
															•	•			,										
				•			•		•							٠		•									•		
•			•		-										••	•	•						8					•	
				:																									
	<u> </u>									-								-											
				•																									
									-						·	 -				<u>.</u>									_
																						·						.•	
			-	•	-	-				·	•								<u> </u>			3		<u>.</u> .					_
																			•										
															•										•	•			
			-						·																				_

						*	•	•							,		ī	-,				•					_	_		1	
						·.		_	_			<u> </u>			·		:												_		•
								•			•																				
								· .		(·		ļ									···							
	328: 2,	32: 2,	593: 2,	423: 2,	H0171: 1,	34: 1,	656: 1,	S0212: 1,	H0192: 1,	L0005: 1,	S0376: 1,	S0007: 1,	S0046: 1,	H0440: 1,	H0357: 1,	H0592: 1,	H0574: 1,	H0486: 1,	S0280: 1,	H0575: 1,	010: 1,)49: 1,	, L0040: 1,	H0046: 1,	H0123: 1,	T0003: 1,	S6028: 1,	H0252: 1,	H0417: 1,	L0455: 1,	H0163: 1,
	H0435: 2, S0328: 2,	S0027: 2, S0032:	.0786: 2, L0593: 2,	.0362: 2, H0423:	Ţ	F0002: 1, S0134:	H0583: 1, H0656:	•	<u>, -</u> ï	٠_^	Ĺ,	₩,	7	<u>_</u>		Ť,	<u>_</u>	ij,	Ŧ,	Ę,	H0618: 1, S0010:	٠,	-	ļ,		_	٠,	•	Ţ,		1,
	H043	S00 2	L078	L036	H0624:	T000	H058	S0116: 1	H0255:	S0420: 1	S0354:	S0410:	S0045:	S0132:	L0717:	H0455:	H0333:	H0492:	T0114:	L0021:	H061	S0346:	H0196:	H0545:	H0150:	H0246:	H0355:	8033	H0424:	H0169: 1	H0135:
																,	-														
			٠																				*								
	-		-						,					1.			-,					•							. , -		
					·	.,	· · · · · · · ·										•			<u>.</u>					*						
									:	<u> </u>			· .	 .	•				<u>i</u>							·					<u> </u>
				8										_:									*	,							
										8		У.,		·																	
**																										•					
	<u>·</u>				<u>-</u>												-				*.		··-		•		-				
													·													1					

	01/0			· .		-			_									-	•									
									•									-										
										·,																		
																												·
	_		_														_	_										-
7: 1	`~î	- :	5: 1,	Ţ.		<u></u>	 	·	<u></u>		.1,	7	<u></u>	. I	 	3.1	~i	2: 17	1: 1	₩.	÷.		ئے ::	`	`~î	5: 1		735
H0040: 1, H0087: H0268: 1, H0413:	H0623: 1, L0351:	l, S0438:	H0130: 1, H0646:	, S0002:	, L0796:	L0800:	L0764:	L0767:	L0389:	L0776:	L0658:	L0382:	L0789:	1, L0565: 1	52(H0690: 1, H0683:	H0659: 1, H0658:	H0660: 1, H0672:	H0651: 1, H0521	S0044: 1, H0134	L0439:	L0756:	L0752:	L0755:	.0759: 1, L0608:	H0668: 1, H0665:	S0276: 1, S0196: 1,	H
Ħ,Ħ	Ĭ	, SO	Ħ,	So	ដ	3	S,	3,	S,	1, 10	것	ន្ត	S,	Z	Ħ,	Ħ,	Ħ,	Ħ	Ħ	Ħ	Ä	ನ	J,	S,	S	Ħ	S.	21/2
0: 1	3:1	2: 1	0:1		~~	7:1	4: 1	3: 1	4:1	6: 1	7:1	3: 1	7:1	4: 1	 	0:1	9:1	0:1	1:1	4:1	% 	4:	9:1	3:1	9:1	8: 1	6: 1	6.1
H0040: 1, H0087: H0268: 1 H0413	062	F0042: 1	013	S0142: 1	L0762:	.0637:	.0374:	L0773: 1	L0794:	.0806:	.0657:	.0383:	.0647:	.0664:]	r0068: 1	690	905	990	999	90	H0478: 1	L0754: 1	.0779:	L0753: 1	075	990	027	H0506 1 and H0352
工工		H	프	Š	<u> </u>	J	<u> </u>	ב	ᄀ	H	H	لير	ᆸ	н	H	Œ.	Œ	프	프	S	H	닏	<u> </u>	1		프	S	丑
																											•	
									•					•									•				•	
																				•				:				
																												٠
	•								<u>. </u>																			
																								X				
																												
×																												
7,7																												
											•																	
	,														4													
																					٠							
		<u> </u>																										
1																												
 						-						;																
												,																
L																												

																					-					
										-		-		104770,	107300,	107670,	110700,	131210,	135940,	136132,	145001,	146790,	150292,	152445,	152445,	159001,
	· · · · · · · · · · · · · · · · · · ·						Y.				·	-		1q21-q25									·		···	
14PA89: 0 APA61: 0	H0549: 1, H0485: 1, H0039: 1, H0553: 1, H0040: 1 and S0126: 1.	•	AR089: 20, AR061: 8 H0599: 2 1 0759: 2	H0556: 1, H0638: 1,	S0418: 1, S6022: 1,	L0021: 1, S0010: 1,	H0266: 1, H0553: 1,	H0644: 1, L0763: 1,	L0641: 1, L0766: 1,	L0805: 1, L0655: 1,	H0539: 1, S0028: 1 and	L0777: 1.		AR089: 3, AR061: 1	L0747: 12, L0755: 12,	L0766: 9, L0438: 9,	L0754: 7, H0046: 6,	L0751: 6, L0752: 6,	H0068: 5, L0775: 5,	L0439: 5, S0010: 4,	H0547: 4, S0152: 4,	L0740: 4, L0779: 4,	L0759: 4, H0591: 3,	L0771: 3, L0662: 3,	L0774: 3, L0666: 3,	S0028: 3, L0748: 3,
		* .							-					Pro-1 to Ala-12.			*			-			- 1			
043	£	1571	944										1572	945												
2000	776 - 7	2 - 922	2 - 376				-		,		,		2 - 376	3 - 464				*								
	£	671	44				-	0					672	45									-	-		
1174070	11343/2	948419	1172244		•								966830	948630					<u></u>							
rrmnn V12	nirovis		HAHHE43									,		HAJAV28									,			
2.2	S	-	34											35												

																			-											٦
73610,	174000,	179755,	182860,	82860,	82860,	191315,	208250,	230800,	230800,	233710,	266200,	600897,	600995,	601105,	601412,	601518,	601652,	602491						•						
173	174	179	182	182	182	191	502	230	230	233	266	9	9	60	901		601	602												\dashv
			ŭ.								·	7)					-		0											-
ຕໍ	2,	2,	2,	.2,	2,	.2,		7,	: 2,	2,	1,	. 	, , ,	— —	<u>-</u>	Ι,	. L.	1,	: 1,	: 1,	1,	: 1,	-	. 1,	: 1,	1,	: 1,	,	: 1,	: 1,
L0731: 3,	3, H0624: 2	S0045: 2, H0619:	S0222: 2, S0049: 2,	H0052: 2, H0615:	T0041: 2,	S0002	S0426: 2, L0769: 2	L0659: 2,	H0521: 2, H0707	2, L0362:	2, H0170:	1, H0685:	T0049:	1, S0001:	1, S0358:	S0408:	1, S0007:	, S6022:	1, H0431	H0574	T0114:	H0069:	L0105:	H0546:	H0545: 1, H0050	.0163: 1, H0594:	H0266: 1, H0290:	S0214: 1, H0328:	H0688: 1, H0622:	H0673
.0756: 3,]	.0757: 3,]	45: 2,]	22: 2,	52: 2,	S0036: 2, 7	09: 2,	26: 2,]	,0776: 2,]	21: 2,	L0594: 2,	S0011: 2,]	HO171: 1,	S0040: 1,	H0657: 1,	H0638: 1,	S0360: 1,	H0637: 1,	S0132: 1,	H0550: 1,	l,	H0486: 1,	H0250: 1,	1,	H0597: 1,	45: 1,	63: 1,]	66: 1,	14: 1,]	88: 1,	H0032: 1,
L07	L07	800	S02	HOO.	200	H05	S04	L07	H05	L05	800	HOI	200	H06	HOE	S03)H	S01	H05	HOH TO	H04	H02	H01	H05	HOS	L01	H02	S02	HOG	E E
																	:												-	
							÷		٠.										•											
						•										•														
							•									<u>· · · · · · · · · · · · · · · · · · · </u>		 ,						•			*1			
							,									·· -			-,			-							 -	
				;	•																									
					•							*			·,			-	÷								-			
					•																									
							•			<u> </u>																•				,
-	-			-							.		_																	
								-																×						
								-																						

	10,		0.	<u></u>						•				
·		· .		·		*	 .			·				
	H0494: 1, H0560: 1, H0561: 1, H0633: 1, L0762: 1, L0763: 1,	L0773: 1, L072: 1, L0773: 1, L0521: 1, L0768: 1, L0794: 1,	L0803: 1, L0809: 1, L0545: 1, L0664: 1,	٠ ٠ - ٢	S0380: 1, S0350: 1, H0555: 1 H0436: 1	î,	S0206: 1, S0032: 1, L0741: 1, L0749: 1,	L0786: 1, L0777: 1,	1.	AR089: 29, AR061: 9	H0575: 1 and H0083: 1.	AR061: 6, AR089: 3 S0049: 1 and I.0439: 1		AR089: 8, AR061: 8
				*	ě					Ala-4 to Glu-1:1,	Lys-62 to Arg-71.		Lys-42 to Ser-49.	Arg-12 to Thr-20,
							,	,		946		947	1573	948
					•					3 - 368		879 - 640	45 - 206	176 - 388
										46		47	673	48
		<u>.</u> '				<u> </u>				712955		1123470	772797	1091635
		;			-					HAPOR59	•	HBIBF78 1	Li.	HCDAJ15
·					la ²	*				36		37		38

									-							•										
										¥			•	-		0	*	·				<u> </u>				
H0251: 2 and S0392: 1.		AR061: 5, AR089: 2 H0052: 1, L0581: 1 and L0366: 1	AR089: 24, AR061: 15 H0052: 2 1 0759: 2	S0376: 1, H0333: 1,	S0388: 1, L0637: 1,	L0636: 1, L0742: 1 and	L0439: 1.			AR089: 2, AR061: 2	L0766: 3, H0521: 2,	H0422: 2, H0661: 1,	H0369: 1, H0687: 1,	L0646: 1, L0655: 1,	L0665: 1, H0519: 1,	H0436: 1 and L0779: 1.		AR089: 1, AR061: 0	L0439: 6, L0748: 5,	L0758: 4, L0591: 4,	L0766: 3, L0805: 3,	L0438: 3, H0102: 2,	L0666: 2, L0740: 2,	H0423: 2, S0360: 1,	S0046: 1, H0393: 1,	H0411: 1, H0391: 1,
His-55 to Lys-61.		Glu-9 to Asp-14.	Thr-1 to Lys-8,	Gln-60 to Trp-70,	Phe-99 to Lys-106,	Asp-126 to Asn-137,	Arg-139 to Glu-145,	Met-157 to Tyr-164,	Asn-167 to Arg-174.	Gly-68 to Leu-74.			•													
	1574	949	950		,					951							1575	952								
	2 - 190	1 - 297	3 - 593							922 - 1143						*	413 - 655	259 - 522								
	674	49	90	٠	•					51					-	;	675	52					-			
	557243	671209	951228	ā =						1124565							934216	921382					······································			
		HCE1821	HCE3164							HCFCV92 1124565								HCFLI54					9			
		39	40							41								42								-

											4)					-									•	**			
).								•			-																		
١,	HU386: 1, HU136: 1,	H0575: 1. H0023: 1.	` (H0622: 1, T0006: 1,	٦Ť	L0770: 1, L0638: 1,	L0373: 1, L0662: 1,	L0776: 1, L0518: 1,	L0809: 1, L0663: 1,	H0684: 1, H0435: 1,	H0648: 1, H0672: 1,	H0436: 1, H0478: 1,	L0744: 1 and L0747: 1.	AR089: 7, AR061: 3	S0474: 1, T0067: 1,	L0805: 1, L0777: 1,	L0780: 1 and H0423: 1.			· · ·	3	.•	*			•				
		•			:	*								Pro-2 to Leu-23,	Gln-54 to Gly-62,	Glu-68 to Asn-80,	Glu-82 to Pro-94,	Gln-100 to Thr-108,	Pro-114 to Lys-123,	Pro-128 to Lys-137,	Leu-143 to Lys-151,	Pro-157 to Gly-170,	Lys-173 to Lys-185,	Asp-193 to Glu-211,	Gly-236 to Met-241,	Asp-298 to Trp-304,	Tyr-306 to Ile-314,	Thr-322 to Tyr-331,	Thr-371 to Thr-376.	IIe-10 to Cys-21,
														953			:											•		1576
				-										1 - 1146																273 - 1145
														53							•									9/9
		100								·····				1155680																873441
														HCFND04		•						0.					·			
														43				3,												

			<u>-</u> -											•															_
	·																												
														-	,										,				
	AR089: 2, AR061: 1	S0412: 12, L0758: 5,	L0743: 4, L0748: 4,	H0545: 3, L0769: 3,	L0665: 3, H0341: 2,	S0360: 2, H0457: 2,	H0644: 2, H0032: 2,	S0144: 2, L0762: 2,	L0766: 2, L0774: 2,	L0530: 2, H0436: 2,	L0747: 2, L0759: 2,	L0581: 2, H0352: 2,	H0657: 1, H0656: 1,	S0282: 1, H0484: 1,	H0663: 1, S0358: 1,	H0370: 1, L0586: 1,	H0013: 1, S0010: 1,	H0596: 1, H0594: 1,	H0606: 1, H0135: 1,	H0090: 1, H0616: 1,	H0641: 1, H0633: 1,	L0770: 1, L0771: 1,	L0662: 1, L0767: 1,	L0768: 1, L0803: 1,	L0805: 1, L0509: 1,	L0653: 1, L0515: 1,	L0659: 1, H0520: 1,	H0435: 1, H0659: 1,	H0521: 1, H0696: 1,
Thr-24 to Gln-60.	Gly-1 to Trp-6,	Pro-9 to Asp-18,	Val-56 to Thr-66,	Pro-73 to Trp-79,	Ala-82 to Trp-102,	Gln-108 to Cys-119,	Ser-145 to Arg-166,	Arg-239 to Asn-247.	•				•		•						•		-				~		
	954																												
	889 - 2				,	•																			•				
	54										•										=					8			
	1190101					,,				•																			
	HCHIMV63		-																	•					•			٠,	
	44																								_		۰.		

								 ,	-, -	_			,		-									-
								9									;							
S3014: 1, S0027: 1, L0439: 1, L0740: 1, L0749: 1, L0756: 1, S0260: 1 and H0423: 1.		AR089: 16, AR061: 4 H0305: 6 and S0052: 1.	AR089: 4, AR061: 2	7.000.7	AR061: 2, AR089: 2	H0305: 4, H0266: 3,	H0624: 2, H0618: 2,	S0036: 2, H0040: 2,	T0041: 2, L0749: 2,	L0777: 2, H0265: 1,	H0556: 1, S0134: 1,	H0013: 1, H0069: 1,	H0599: 1, H0575: 1,	H0421: 1, T0110: 1,	H0188: 1, H0428: 1,	H0135: 1, H0634: 1,	H0488: 1, H0056: 1,	H0623: 1, S0038: 1,	S0386: 1, H0100: 1,	T0042: 1, L0766: 1,	H0521: 1, H0522: 1,	H0436: 1, S3014: 1,	S0027: 1, L0779: 1,	S0260: 1, L0588: 1,
	His-48 to Thr-54.	Ala-33 to Ile-42.	Lys-1 to Ser-7,	r10-/1 to Giy-01.	Leu-73 to Lys-87,	Met-91 to Pro-171,	Glu-198 to Ser-298,	Ser-306 to Ser-336,	Ser-338 to Ser-373,	Pro-379 to Val-407,	Ser-410 to Gly-418,	Ser-425 to His-458,	Val-464 to Arg-541.			-							•	
	1577.	955	926	1578	957																			
	2 - 262	118 - 282	116 - 448	178 - 309	1527 - 3206								-						,					
	219	55	56	829	57																			
	862999	889416	1125258	948690	1224131				-				•				 :-	***			•		-	•
	1	HCWDL45	HCWEI19		HCWKB72											٠	00				<u> </u>		0	
		45	46		47												•	-						

0									•	-						_	•			-								
							:_							i								a.					•	
							,																					
		•					•																					
L0366: 1 and L0462: 1.		AR061: 9, AR089: 3 H0339: 1		AR061: 0, AR089: 0	H0551: 5, H0545: 4,	H0521: 4, L0748: 4,	.0790: 3, S0278: 2,	586: 2, H0333: 2,	H0632: 2, H0052: 2,	H0023: 2, S0250: 2,	42: 2, S0426: 2,	H0529: 2, L0565: 2,	547: 2, L0439: 2,	H0170: 1, H0685: 1,	295: 1, H0458: 1,	18: 1, L0534: 1,	32: 1, H0587: 1,	H0485: 1, H0544: 1,)81: 1, L0471: 1,	S0050: 1, S0388: 1,	H0510: 1, H0286: 1,	H0428: 1, H0032: 1,	H0124: 1, H0488: 1,	L0065: 1, H0538: 1,	S0002: 1, L0770: 1,	٠,	₩.	.0363: 1, L0774: 1,
1.03		AR HC		AR	<u>H</u>	H05	107	HOS	HOC	HOO	S01	H05	HOS	H0	H02	S04	S01	HO4	E E	S00	HOS	H04	HOI	100	800	L07	100	ភ្ជ
			Glu-15 to Ser-24.	Asp-19 to Leu-24.											,													
	1579	856	1580	959																								
	101 - 193	549 - 298	144 - 320	3 - 320					,												- · · · ·							
	619	28	089	59																								
	200929	1125713	911314	691163												•												
		HDDAF49 1125713		HDPGQ74			•																					
		48		49																			-					

	•				
*				,	
L0806: 1, L0654: 1, L0658: 1, L0663: 1, H0522: 1, L0743: 1, L0754: 1, L0747: 1, L0780: 1 and L0758: 1.	AR061: 1, AR089: 1 H0271: 18, L0659: 18, S0152: 15, H0521: 13, L0666: 7, S0132: 6, L0754: 5, L0601: 5, S0360: 4, H0494: 4,	LO771: 4, LO033: 4, LO751: 4, H0295: 3, H0486: 3, H0635: 3, H0416: 3, H0615: 3, L0662: 3, S0428: 3,	L0731: 3, H0661: 2, S0376: 2, H0437: 2, H0587: 2, H0485: 2, T0039: 2, H0318: 2, H0620: 2, H0266: 2,	ત્યું તું તું તું તું	S0374: 2, H0519: 2, L0439: 2, L0779: 2, L0755: 2, L0604: 2,
	096		:		
	118 - 282	-,	9		
	09				
	752975				
	HDPGS68				
	20	•			

	· · · · · · · · · · · · · · · · · · ·			
L0698: 2, H0149: 1, H0686: 1, S0212: 1, H0255: 1, H0637: 1, S0046: 1, H0411: 1, S0278: 1, H0599: 1, H0251: 1, H0545: 1, H0457: 1, H0024: 1,		L0641: 1, L0645: 1, L0648: 1, L0767: 1, L0649: 1, L0389: 1, L0388: 1, L0803: 1, L0654: 1, L0665: 1, S0052: 1, S0053: 1,	1	AR089: 3, AR061: 1 L0756: 3, H0622: 2, L0751: 2, H0624: 1,
				Gin-19 to Gly-24, Gin-34 to Leu-42, Gin-44 to Glu-49,
				961
				3 - 470
	•			
·				1172240
				HDPIX67
				51.

						·
				*		ų
×						
H0265: 1, S0402: 1, H0650: 1, S0444: 1, H0497: 1, H0643: 1, H0038: 1, H0646: 1, S0002: 1, L0764: 1, L0766: 1, L0803: 1, L0776: 1, L0803: 1, L076: 1, H0520: 1,	H0134: 1, L0743: 1, L0777: 1 and H0543: 1.	AR089: 9, AR061: 4 L0794: 5, L0439: 2, L0747: 2, H0521: 1, L0779: 1, L0777: 1 and L0594: 1.	1	AR089: 16, AR061: 8 L0803: 5, L0655: 3, L0747: 3, L0779: 3,	L0771: 2, L0766: 2, L0775: 2, L0666: 2, S0126: 2, L0755: 2,	L0758: 2, H0656: 1, H0351: 1, H0586: 1, H0559: 1, H0598: 1, H0038: 1, L0761: 1,
Gln-56 to Glu-61, Leu-76 to Phe-85, Cys-97 to Arg-102.	Gln-11 to Glu-16,	704-01 10 TO-10-10-	Ser-48 to Ser-53.	Pro-13 to Leu-23, Glu-39 to Gly-51, Ser-54 to Glu-65,	Ala-77 to Gly-84, Gln-90 to Val-96, Arg-104 to Gly-113,	Thr-120 to Cys-125, Asn-154 to Ser-160, Glu-162 to Val-168, Leu-247 to Gln-252.
	1581	962	1582,	963		
	2 - 334	2 - 181	. 69 - 230	2 - 958		
* (¥)	681	62	682	. 63		
	954385	1125610	915919	1136137		. •
•		HDPXN01		HDQFT77		
		52		53		

L0804: 1, L0774: 1, L0805: 1, H0521: 1, L0750: 1 and L0759: 1. L0750: 1 and L0759: 1. AR061: 10, AR089: 3 L0659: 3, L0766: 2, S0330: 2, L0731: 2, L0758: 2, H0171: 1, H0650: 1, S0356: 1, H0675: 1, S0182: 1, H0675: 1, L0655: 1, L0637: 1, L0655: 1, L0666: 1, H0659: 1, L0666: 1, H0659: 1, L0666: 1, H0518: 1, L0666: 1, H0518: 1,	S0260: 1 and L0588: 1. AR061: 4, AR089: 3
55. 7 11, 11, 11, 11, 11, 11, 11, 11, 11, 11,	
25.7. 11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	
55. 7 11, 11, 11, 11, 11, 11, 11, 11, 11, 11,	
25.7. 11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	
25.7. 11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	
10, ARG 10, ARG 10, ARG 10, ARG 1, L07313 1, H0171 1, H0009 1, L0770 1, L0655 1, L0655 1, L0752	AR0
): 1 ar 1: 4,
L0804: 1 L0750: 1 L0750: 1 L0750: 1 L0659: 2 L0659: 2 L0659: 1 H0675: 1 H0675: 1 H0675: 1 H0666: 1 L0666: 1 L0666: 1	\$0260 4R06
rg-29 yr-30 yr-30 r-31 y-23, y-85, s-97, y-85, y-85, y-85, y-85, y-85, y-85, y-85, y-85, y-85, y-87, y-87, y-87, y-27, yr	-13.
A to	Lys
Phe-286 to Arg-294, Pro-296 to Tyr-301, Asp-308 to Ser-317. Glu-11 to Gly-23, Ser-26 to Glu-37, Ala-49 to Gly-56, Gln-62 to Val-68, Arg-76 to Gly-85, Arg-76 to Gly-85, Pre-219 to Gly-85, Pre-219 to Gly-224, Pre-268 to Tyr-273, Asp-280 to Ser-289.	Leu-7 to Lys-13
	니
1583	965
	1024
50 - 391	1 1
2(1239
683	9
1508	226
508498	1151226
R50	125
HE2FR50	HE2SN25
P4	
55	55

							·	,	
	,						*	- '	
L0439: 2, H0624: 1, H0171: 1, S0114: 1, L0774: 1, H0539: 1 and L0752: 1.	AR089: 11, AR061: 10 H0013: 2 and H0427: 1.		AR061: 0, AR089: 0 H0617: 7, H0483: 1, S0007: 1, S0051: 1.	H0182: 1, H0606: 1, L0769: 1, L0761: 1 and H0547: 1.	AR061: 1, AR089: 0 L0804: 2, S0402: 1, H0648: 1, L0748: 1 and L0749: 1.	AR089: 1, AR061: 0 H0457: 4	AR061: 8, AR089: 6 H0170: 1, S0045: 1, H0619: 1, H0046: 1, L0761: 1, L0754: 1 and S0026: 1.	AR089: 16, AR061: 7 H0009: 1 and H0520: 1.	
	Ser-74 to Ala-81.		Gly-48 to Gly-54.			Phe-28 to Val-36, Phe-44 to Pro-49.	Leu-78 to Cys-88.		
1504	966	1585	296		896	696	970	971	1586
	247 - 597	34 - 210	453 - 109		51 - 221	257 - 421	216 - 479	1010 - 669	82 - 180
103	66	685	29		89	69	70	71	989
103000	1147168	851514	963673		691516	851009	948667	1111177	735763
	HE8AE26		HEBGK01		HEFMB30	HEOPE58	HETBR74	HFCAG94	
	56		57		28	59	09	19	

																														_
104770,	107300,	107670,	110700,	131210,	135940,	136132,	145001,	146790,	150292,	152445,	152445,	159001,	173610,	174000,	179755,	182860,	182860,	182860,	191315,	208250,	230800,	230800,	233710,	266200,	600897,	600995,	601105,	601412,	601518,	601652,
1q21-q25	1				•								•														,			
AR089: 3, AR061: 1	L0747: 12, L0755: 12,	L0766: 9, L0438: 9,	L0754: 7, H0046: 6,	L0751: 6, L0752: 6,	H0068: 5, L0775: 5,	L0439: 5, S0010: 4,	H0547: 4, S0152: 4,	L0740: 4, L0779: 4,	L0759: 4, H0591: 3,	L0771: 3, L0662: 3,	L0774: 3, L0666: 3,			س	S0045: 2, H0619: 2,	S0222: 2, S0049: 2,	H0052: 2, H0615: 2,	S0036: 2, T0041: 2,	H0509: 2, S0002: 2,	S0426: 2, L0769: 2,	L0776: 2, L0659: 2,	H0521: 2, H0707: 2,	L0594: 2, L0362: 2,	S0011: 2, H0170: 1,	H0171: 1, H0685: 1,	S0040: 1, T0049: 1,	H0657: 1, S0001: 1,	H0638: 1, S0358: 1,	S0360: 1, S0408: 1,	H0637: 1, S0007: 1,
Ile-256 to Val-269,	Gln-296 to Gln-301,	Ile-316 to Leu-322,	Glu-351 to Leu-359,	Ser-395 to Arg-406,	Gly-425 to Leu-431.	•																						-		
972			-															ż												
1592 - 273					•				<u>,,,,</u>	- 8					•	•			•											•
72																													•	
957528									•			-		_													_			
HFPHR82		-										ı							÷											
62												4																		

						-	-	_				-			· · ·									-						
						•										•														
602491					•					•	. ,														÷					*
69					<u>-</u> _									<u>. — . – . </u>																<u>.</u>
																					•									
			٠											•																~
																				1			<u>. </u>		<u> </u>					
	•		_					•	-		_	_	•				~													
2: 1,	31:1,	74: 1,	4: 1,	59: 1,	5: 1,	46: 1,	50: 1,	4: 1,	30: 1,	8: 1,	22: 1,	73: 1,	4 : 1,	t 0: 1,	i7: 1,	00: 1	50: 1;	33: 1,	3: 1,	2: 1,	1:1,	4: 1,	9: 1,	4: 1,	14: 1,	0: 1,	78: 1,	0:1,	36: 1,	0: 1,
, S6022:	H0431	H0574:	T0114:	H0069	L0105:	H0546:	, H0050:	H0594:	H025	H0328:	H0622	H0673:	S0364:	H0040:	T0067:	H0100:	H0560	H0633	L0763:	L0772:	L0521:	L0794:	L0809:	L0664:	H0144:	H0660:	, S0378:	S0350:	, H0436:	S035
	``		I,	7	1	_	_	1:1,1	5: 1,	<u>,</u>	-	<u>_</u>	<u>_</u>	_	-	<u>_</u>	1,	-		Ť	Į,	7	-			Ţ	, – į	Ę,	_): 1, 1
S0132: 1	H0550:	H0455:	H0486:	H0250:	H0156:	H0597:	H0545:	.0163: 1	H0266: 1, H0290:	S0214:	H0688:	H0032:	H0674:	H0090:	H0551:	H0268:	T0494:	H0561:	.0762:	.0638:	,0773:	.0768:	.0803:	,0545:	L0665:	S0126:	H0672:	S0380:	H0555:	H0540: 1, S0390:
S	豆	프	귶	珥	丑	珥	正	ㅂ	프	Ś	耳	프	I	≖	珥	五	ı	垂	H	ᆸ	ㅂ	브	브	ㅂ	ㅂ	Ś	丑	Ø	프	
														-																
																			•											
			٠.														٠.													
																														•
-									•	—											•							·		
																								•						
				<u></u>		<u> </u>	 ,					à e									•									*
																			÷											
-									•	-	*.		-			×														
X.																								:				•		
					1			<u>. </u>			 -								<u> </u>											
											,																			
-												<u> </u>				- -			 -											`-
											÷																			
L	7																													
L																														

		,	,

S0206: 1, S0032: 1, L0741: 1, L0749: 1, L0786: 1, L0777: 1, L0758: 1, S0026: 1 and H0506: 1.		AR089: 1, AR061: 0 L0803: 6, L0774: 2, H0056: 1, L0761: 1, L0800: 1, L0766: 1, L0806: 1 and H0539: 1.	
	*	Arg-9 to Leu-28, Ser-108 to Thr-113, Gly-152 to Gly-159, Pro-170 to Ser-184.	Ser-84 to Thr-89, Gly-128 to Gly-135,
	973	974	1587
	78 - 275	590 - 3	1 - 498
	73	74	V 892
	857780	1125189	868785
	HHF0084	HISAM68	
· .	63	64	

		*		-2.5						2.00							1		-									
																							. '					
		•		- 311-3		*	•									•				*	<u></u>				<u> </u>			
							,										•											
	AR089: 33, AR061: 7	H0556: 3, H0208: 3,	L0471: 3, H0179: 3,	H0644: 3, S0344: 3,	H0521: 3, L0439: 3,	S0420: 2, S0360: 2,	H0599: 2, H0264: 2,	H0280: 2, S0210: 2,	H0547: 2, H0658: 2,	L0750: 2, L0731: 2,	L0588: 2, L0604: 2,	H0543: 2, H0265: 1,	T0002: 1, H0140: 1,		S0001: 1, H0669: 1,	H0662: 1, H0306: 1,	S0418: 1, H0580: 1,	L0717: 1, H0549: 1,	H0453: 1, H0592: 1,	H0497: 1, H0632: 1,	T0039: 1, T0112: 1,	H0575: 1, H0036: 1,	H0309: 1, H0544: 1,	H0172: 1, H0123: 1,	H0620: 1, H0024: 1,	H0051: 1, H0188: 1,	H0615: 1, H0604: 1,	H0031: 1, L0456: 1,
Pro-146 to Ser-160.	Lys-1 to Gly-9,	Ser-30 to GIY-30.																										
	975		-										•		_													
	21 - 230							3						î											•			
	75																		:									
	942901	,				-								· .		Ž TIŽO		9-					• • • • •					
	HLHDD45		2	-	-		,											•			-							
-	59					150																	-			71		

																								.*	·		
																	-			<u>-</u>			- 1				_
						,									-						•						
H0124: 1, H0376: 1,	S0036: 1, H0059: 1, H0100: 1, T0041: 1	T0042: 1, S0150: 1,	H0646: 1, H0538: 1,	L0637: 1, L0551: 1,	Ĺ,	L0789: 1, L0663: 1,	L0438: 1, H0520: 1,	H0519: 1, S0126: 1,	` — `	H0539: 1, S0152: 1,	`	<u> </u>	H0343: 1, L0591: 1,	L0592: 1, L0593: 1,	 7-4	AR089: 53, AR061: 4	H0444: 2			_	AR061: 1, AR054: 0	H0638: 1, H0046: 1,	S0112: 1 and S0002: 1.				AR061: 2, AR089: 1
						ē		-			-					Lys-8 to Ser-13,	Lys-52 to Ser-69,	Cys-87 to His-93.		Leu-20 to Gly-25,	Pro-28 to His-40.			Ser-1 to Leu-6,	His-54 to Cys-61.	Phe-1 to Arg-12.	
			•					,	٠.			8.			•	916			1588	776				1589		1590	978
			••									*				462 - 160			1 - 204	236 - 3			0	127 - 462		55 - 171	880 - 239
							•		•							76		•	889	11				689		069	78
			-								-				<u> </u>	1087684			462502	683031		•	•	943946		947911	1125710
																HMMAB49 1087684	,.		•	HMSG027							HNHAM52 1125710
										٠						99				29					-		89

						-														-					
H0457: 1, H0674: 1, L0803: 1, S0053: 1, L0756: 1 and L0592: 1.		0, AR089: 0	S6024: 1, S0001: 1, (0053: 1, S0216: 1,	S0028: 1 and S0260: 1.	4, AR089: 4	L0748: 7, L0774: 2,	L0749: 2,	S0038: 1,	L0637: 1,	C0804: 1, L0789: 1 and			3, AR089: 2	S0354: 2, L0438: 2,	L0586: 1,	H0052: 1,	1, L0471: 1,	S0003: 1,	, L0655: 1,	, S0126: 1,	H0521: 1 and S0424: 1.		4, AR089: 2	L0758: 4, H0556: 3,	H0657: 3, H0435: 3,
H0457: 1, H0674: L0803: 1, S0053: 1, L0756: 1 and L0592	3.	AR061: (S0053: 1, S0216: 1	S0028: 1 8	AR061:	L0748: 7	S0216: 2, L0749: 2	H0455: 1, S0038:	S0464: 1, L0637:	L0804: 1,	S0053: 1.		Q.		L0750: 2, L0586: 1		H0009: 1,	L0179: 1,	L0055: 1,	L0526: 1,	H0521: 1		AR061:	L0758: 4	H0657: 3,
	Arg-1 to Asp-6, Glu-26 to Ser-33			,									Pro-53 to Glu-63,	Ser-105 to Glu-11		·									
	1591	979			40 980							1592	56 981	<u>- </u>								9 1593	9 982		
	12 - 131	1 - 129	4		1348 - 1040							3 - 284	1076 - 1456		*		.					198 - 389	115 - 549		
	691	79			80							. 692	81									693	82		
	457010	785580			1123883				٠			859822	1123893			<u></u>					-	653276	870674		
		HNHEQ86		-	HINHHIF46								HOECV83			,	•						HORBO54		
		69		-~	70		=			~			71										72		

		-	.						_												-							-		
												. •					,													
										٠			•																	
			-													•														
	-																-				·.									
										<u>. </u>						*							<u> </u>	-		-				
77: 3,	45: 2,	86: 2,	16:2,	H0701: 2,	28: 2,	40: 1,	95: 1,	16: 1,	64: 1,	80: 1,	78: 1,	13: 1,	27: 1,	30: 1,	92: 1,	53: 1,	55: 1,	13: 1,	94: 1,	09: 1,	0: 1,	44: 1,	20: 1,	93: 1,	21: 1,	34: 1,	28: 1,	to: 1,	55: 1,	45: 1,
3, LO7	3, S0045: 2,	2, H0586:	2, H0616:	2, H07	2, \$0328:	2, S0040:	, H0295:	1, S0116:	1, H0664:	, H0580:	1, S0278:	1, H0013:	1, H0427:	`	1, H0292:	l, H0553:	1, L0455:	1, H0413:	1, H0494:	1, H0509	, S0210:	l, H0144:	I, H0520:	1, H0593:	1, H0521	<u> </u>	1, S0028:	I, L0740:	, L0755:	, H0445
.0749: 3, L0777: 3,	H0677:	H0619:	H0032:	L0772: 2	H0547:		S6024: 1	H0650:	H0661: 1,	S0444: 1	S0132: 1	H0486:	H0069:	H0004:	H0050: 1	r0006: 1	H0181:	H0038:	T0042: 1	H0561:	S0344: 1	768: 1	.0438: 1	H0519:	H0539:	H0522:	H0555:	L0743: 1	L0752: 1	.0759: 1
Ä	Ħ	Ħ	茁	ដ	Ĭ	Ĭ	<u>8</u>	苴	H	S	<u>8</u>	茁	Ĭ	Ĕ	茁	Ĕ	茁	茁	Ĕ	Ħ	S	ĭ	걸	茁	Ĭ	Ĭ	Ĭ	<u> </u>	걸	<u> </u>
				•	•													•			• .									
				,	•			,								-												•		•
									 · · ·						•									•						
_													_																	
					•																									
					·												-									-				
\vdash																									<u>.</u>					
								÷																		, -				
L																														

		,				,		,										
	-			•					-	•				1.				
L0596: 1, L0595: 1, H0542: 1, H0423: 1 and S0424: 1.	AR089: 74, AR061: 10 S0027: 5, S0356: 2,	H0659: 2, L0591: 2,	H0543: 2, S0282: 1, S0354: 1, H0619: 1,	Ξ,	 L0455: 1, H0494: 1, S0142: 1, L0667: 1,	Ť	Ĺ,		H0478: 1, H0631: 1,	L0755: 1 and S0260: 1.		AR089: 1, AR061: 1	S0150: 2, S3014: 1 and S0028: 1.			AR089: 49, AR061: 16 H0124: 3		AR061: 6, AR089: 3 L0618: 1, L0770: 1,
	Glu-41 to Arg-47.							•		-	*	Ser-111 to Ala-121.		Phe-36 to Ser-54,	Ala-64 to Asn-70.	•		Ala-155 to Glu-160, Arg-166 to Gln-175.
	983										1594	984		1595		985	1596	986
	182 - 3		٠.	-8-							233 - 370	922 - 908		55 - 333		929 - 948	226 - 354	1369 - 812
	83										694	84		695		85	969	98
	1122896		i i		.0.)					913876	1123830		786811		1112136	507847	1124582
	HOSFZ73							2900			,	HPIAU71				HRDBT72		HSDFT51
	73							1.				74				75		76

																-					-							
_				· :			S.	-		•				<u>. </u>		·		-										_
																•			٠			•						
		+	<u>:</u>	.															<u> </u>		***					• .		
L0803: 1 and S0031: 1.		AR089: 1, AR061: 1	S0026. 3, 30426. 2, S0282. 1, S0045: 1	S0132: 1, S0222: 1,	H0416: 1, S0052: 1,	S0152: 1 and S0260: 1.	AR089: 2, AR061: 0	H0036: 2	AR061: 6, AR089: 3	H0036: 2, H0619: 1,	H0050: 1 and L0792: 1.	AR061: 3, AR089: 1	L0659: 7, L0777: 7,	S0358: 6, H0486: 6,	H0622: 6, S0360: 4,	L0662: 4, H0013: 3,	H0144: 3, S0328: 3,	L0751: 3, L0731: 3,	H0624: 2, H0619: 2,	H0328: 2, H0163: 2,	L0520: 2, L0764: 2,	L0747:2, S0116: 1,	S0356: 1, S0376: 1,	H0431: 1, H0600: 1,	H0632: 1, H0244: 1,	H0599: 1, H0123: 1,	H0050: 1, H0051: 1,	S0250: 1, H0688: 1,
	Ala-155 to Glu-160.	Val-174 to Pro-179,	FIO-192 to lie-207.				Asn-5 to His-12.		His-28 to Gln-36.		-	Ser-2 to Arg-7,	Arg-22 to Pro-28.													×		÷
	1597	987		-			. 886		686			990																
	1 - 591	3 - 755		• .			223 - 378		146 - 301			64 - 249																
	. 269	87					88		68			90						*				•						
	947918	948669				•	531267		531248			571314										•			×			
		HSDJM56					HSICX21		HSIDS82			HSNAH21					, 											
		11					78		79			80																

		•														,		,	•	-		0				• •		-	
								,		i	4																		
H0030: 1 H0000: 1		<u>`</u> —`	H0647: 1, H0646: 1,	L0640: 1, L0763: 1,	L0768: 1, L0649: 1,	L0806: 1, L0793: 1,	L0666: 1, H0690: 1,	H0684: 1, H0658: 1,	H0648: 1, L0779: 1,	L0780: 1, L0759: 1 and	S0011: 1.	AR089: 5, AR061: 1	H0038: 5, L0748: 5,	L0777: 5, L0766: 4,	L0769: 3, L0756: 3,	L0759: 3, S6028: 2,	H0271: 2, L0776: 2,	H0435: 2, L0754: 2,	L0747: 2, L0779: 2,	L0752: 2, L0758: 2,	H0595: 2, L0596: 2,	H0393: 1, H0431: 1,	H0486: 1, H0427: 1,	H0004: 1, H0318: 1,	H0085: 1, H0546: 1,	L0471: 1, S0022::1,	H0252: 1, H0644: 1,	÷,	H0124: 1, H0616: 1,
	1						a					Gln-36 to Asp-41,	Ser-73 to Glu-82,	Phe-85 to Arg-98,	Leu-170 to Glu-176,	Lys-226 to Asp-239,	Gly-285 to Leu-297,	Asp-327 to Glu-339,	Glu-343 to Leu-348.					•					
												991										0			•				
						 (,			•	-	*	1334 - 222	ī			•													
												91		- 15								- *							-
												966264					•												
												HSODC08					3		-										
												81										<u>.</u>							

			:	
S0142: 1, S0422: 1, L0770: 1, L0761: 1, L0653: 1, L0634: 1, L0659: 1, L0544: 1, L0664: 1, H0144: 1, S0126: 1, H0670: 1, H0555: 1, H0436: 1, H0557: 1, S0028: 1, L0780: 1, L0731: 1, L0757: 1, L0361: 1, S0026: 1, S0412: 1 and L0697: 1.	AR089: 1, AR061: 0 H0478: 1, L0748: 1 and L0749: 1.	AR050: 19, AR054: 9, AR051: 5, AR089: 1, AR061: 0 S0216: 1 and S0026: 1.	AR061: 4, AR089: 2 H0264: 1 and L0754: 1.	AR089: 11, AR061: 1 H0543: 4, S0354: 3, H0423: 3, H0656: 2, L0749: 2, H0306: 1, H0638: 1, S0356: 1, S0358: 1, S0360: 1, H0637: 1, S0046: 1,
	Ser-20 to Tyr-25.		Arg-44 to Gly-59.	Pro-52 to Thr-58, Pro-115 to Asp-122, Asp-190 to Ile-208.
	992	993	994	995
	3 - 116	184 - 444	41 - 286	2 - 2167
	92	93	94	95
	736098	963554	844319	931155
*	HSPAB58	HSQCM85	HTOIA82	HUUDHS7
	82	83	84	\$8

· ·					
					•
S0132: 1, H0486: 1, H0090: 1, S0112: 1, T0042: 1, H0494: 1, S0210: 1, L0770: 1, L0662: 1, L0659: 1, L0665: 1, H0682: 1, L0779: 1, H0445: 1, H0653: 1 and S0424: 1.	AR089: 2, AR061: 1 H0581: 2, H0657: 1, S0358: 1, S0046: 1, S0222: 1, H0486: 1, H0551: 1, L0761: 1, L0766: 1, L0774: 1, L0659: 1, L0666: 1, L0664: 1 and H0435: 1.	AR089: 2, AR061: 1 H0255: 1 and H0581: 1.	AR089: 28, AR061: 24 L0748: 2, H0580: 1 and H0421: 1.	AR089: 17, AR061: 11 S0358: 2 and H0539: 1.	AR061: 0, AR089: 0 L0766: 10, L0779: 3, L0759: 2, S0114: 1, S0116: 1, H0431: 1,
		Ser-26 to Ser-33.	Lys-1 to Gln-8, Gln-28 to Gly-34, Pro-46 to Arg-51. Gly-1 to Ser-9.	Asp-30 to Trp-35, Ser-38 to Arg-43.	Leu-91 to Glu-98, Ile-110 to Tyr-116, Ser-160 to Thr-168, Gly-175 to His-182.
	966	1598 997	998	666	1000
	960 - 745	162 - 341 188 - 370	2076 - 1705 32 - 232	2 - 382	184 - 816
	96	969	86	66	100 ·
	1145916	662347 947915	1156447 747723	969190	920850
	HWACV74	HWAFW39	HWBBR65	HWMES65	HISBG28
	98	87	88	68	06

	Γ -			-															7
	188826, 250100,	250800, 250800		<u></u>	*	-	_						. *						
	22q13.2- q13.31	÷ .				•				,							٠.		
H0013: 1, H0251: 1, H0628: 1, H0646: 1, L0761: 1, L0662: 1, L0776: 1, L0665: 1, H0702: 1, H0520: 1, H0539: 1, L0749: 1, L0750: 1, H0444: 1,	AR089: 1, AR061: 1 L0439: 13, L0740: 12,	H0046: 10, H0556: 9, L0752: 9, H0052: 7.	H0617: 7, L0748: 7,	L0758: 7, S0222: 6,	L0754: 6, S0049: 5,	H0620: 3, S0002: 3, L0769: 5, L0438: 5,	`\^`	S0278: 4, H0599: 4,	S0010: 4; L0163: 4,	L0804: 4, L0663: 4,	H0144: 4, H0521: 4,	L0742: 4, L0743: 4,	L0751: 4, L0753: 4,	H0657: 3, H0618: 3,	H0050: 3, L0471: 3,	S0051: 3, T0010: 3,	S6028: 3, H0266: 3,	H0551: 3, H0494: 3,	S0144: 3, H0529: 3,
	Pro-32 to His-49.		•	•	• •	*							٠					,	
:	1001				w	-							-						
	3 - 377																		
	101			_								=					m		. 1
·	786337																		
	HAJAE60					•				,									
	91	- /	-																

			_			-					·		:										<u></u>				_			
											٠						(2													
			·		·			•			Y.														- 4					
																											,			
																	¢.												•	
							_	_			_							_				_			•			•		
L0770: 3,	L0766: 3,	3, L0659: 3,	666:3,	H0696: 3	L0757: 3	H0265: 2	418:2	H0333: 2	H0042: 2	H0457: 2,	\$0003: 2,	S0364: 2,	S0366: 2	L0638: 2,	L0372: 2,	L0776: 2,	L0789: 2,	H0658: 2,		L0599: 2,	H0506: 2	H0650: 1	S0212: 1	H0663: 1	H0638: 1	L0617: 1,	S0408: 1,	132: 1	370: 1	L0623: 1,
3,	: 3, LO	3, LO	3, LO	: 3, HO	ຕົ	ຕົ	H0656: 2, S0418:	: 2, H0	2	: 2, H(ત	ผ์	່ ~ໍາ	່ ~ໍາ	ัญ์	તં	2, LO	2, HO	H0660: 2, S0152:	: 2, LO	: 2, H0	:1,H0	: 1, S0			1,10	1, S0	: 1, S0132:	H0645: 1, H0370:	1,
L0763	L0771:3,	L0775: 3,	L0809:	S0330:	L0747:	L0759:	H0656	L0149: 2,	H0427:	H0590: 2,	H0041:	T0006:	H0124:	H0135:	L0637:	L0662:	L0655: 2,	S0374: 2,	H0660	L0485: 2,	L0601: 2,	S0040: 1,	H0341: 1,	S0282: 1,	H0459:	S0420: 1,	\$0360: 1,	H0208:	H0645	L0622:
	· · ·				-	•								•					-					,		n				
	•																				-									
- 1				•			1			•													~							. !
		_	-																					_						
	,		<u> </u>							,						•	 -									*				
	•																						,						•	
			•		-,				· ·	. 		•			-	_	<u></u> ,	•	•							•			•.	
									-														•			•				
									•								•										•			
ů.	-														_															
																											•)			
																*							-, -							
		,		_																										

		٠,								•					•											•				
							·											0												
			-					,::																					-	
											,						•													
							-		•	_										·							<u></u>		-	
013: 1,	56: 1,	97: 1,	336: 1,	18: 1,	H0596: 1,	231: 1,	H0009:1,	H0242: 1,	H0024: 1,	H0051: 1,	H0267: 1,	H0604: 1,	H0181: 1,	163: 1,	T0067: 1,	38: 1,	12: 1,	42: 1,	170: 1,	44: 1,	61: 1,	73: 1,	41: 1,	64: 1,	21: 1,	94: 1,	51: 1,	06: 1,	57: 1,	42: 1,
H0486: 1, H0013:	S0280: 1, H0156:	.0021: 1, H0097:	1, H0036:	30346: 1, H0318:					Ή,	<u> </u>	<u> </u>			<u>_</u>	_	1, S0038:	1, S0112:	Ť	1, S0370:	1, S0344:	1, L0761:	1, L0373:	1, L0641:	1, L0764:	1, L0521:	·	1, L0651:	1, L0806:		1, L0542:
H0486	S0280:	L0021:	H0575:	S0346:	H0230: 1	H0597: 1	H0150:	N0006:	H0012:	H0373:	H0083:	H0292:	H0553:	H0168:	H0090:	H0264:	S0386:	L0351:	H0561:	S0142:	L0640:	T0667:	L0646:	L0374:	L0773: 1	L0626:	L0533:	L0376:	L0805:	L0634: 1
											-																			
		٠													٠															
												-															•			
_											 -					- قا	·				*		×	. ,	- 33 •	, 1		,=		
		1							·		يحد					<u>.</u>														
										,																				
_			,	·						-							•										<u> </u>			
	•																						٠							
												,,			-							•							•	
L											· -	1		 -																
					<u></u>																								··.	

L0783: 1, L0529: 1, L0787: 1, L0655: 1, H0519: 1, S0380: 1, H0522: 1, H0436: 1, H0576: 1, L0609: 1, L0744: 1, L0745: 1, L0749: 1, L0784: 1, L0749: 1, L0784: 1, L0744: 1, L0784: 1, H0444: 1, L0584: 1, L0595: 1, S0011: 1, H0444: 1, L0584: 1, H0442: 1 and H0008: 1, H0442: 1, R089: 10, AR061: 3, H0703: 7, H0494: 3, H0599: 3, H0542: 3, H0549: 1, S0031: 1 and H0549: 1, S0421: 1, S0418: 1, S0422: 1, H0550: 1, H0549: 1, S0144: 1, S0022: 1, H0550: 1, H0549: 1, S0144: 1, S0022: 1, H0550: 1, H0551: 1, H0550: 1,	1.
L0783: 1, L0529: 1 L0787: 1, L0665: 1 H0519: 1, S0380: 1 H0522: 1, H0436: 1 L0744: 1, L0745: 1 L0744: 1, L0745: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 H0444: 1, L0584: 1 H0444: 1, L0584: 1 H0549: 1, H0694: 1 H0549: 1, H0694: 1 H0549: 1, H0545: 1 H0556: 2, L0766: 1 H0556: 2, L0766: 1 H0550: 1, H0545: 1 H0550: 1, H0545: 1 H0550: 1, H0545: 1 H0550: 1, H0545: 1 H0550: 1, H0559: 1 H0559: 1, H0559: 1 H0559: 1, H0559: 1 H0559: 1, H0559: 1 H0559: 1, L0759: 1	1.
L0783: 1, L0529: 1 L0787: 1, L0665: 1 H0519: 1, S0380: 1 H0522: 1, H0436: 1 L0744: 1, L0745: 1 L0749: 1, L0748: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 H0522: 1 and H000 AR089: 10, AR06 H0549: 1, H0684: 1 H0549: 1, H0649: 1 H0551: 1, S0442: 1 H0556: 2, L0766: 1 R0393: 1, H0545: 1 H0551: 1, H0494: 1 S0222: 1, H0545: 1 H0551: 1, H0545: 1 H0551: 1, H0549: 1 H0551: 1, H0559: 1 H0559: 1, H0559: 1 H0559: 1, H0559: 1	1.
L0783: 1, L0529: 1 L0787: 1, L0665: 1 H0519: 1, S0380: 1 H0522: 1, H0436: 1 L0744: 1, L0745: 1 L0749: 1, L0748: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 H0522: 1 and H000 AR089: 10, AR06 H0549: 1, H0684: 1 H0549: 1, H0649: 1 H0551: 1, S0442: 1 H0556: 2, L0766: 1 R0393: 1, H0545: 1 H0551: 1, H0494: 1 S0222: 1, H0545: 1 H0551: 1, H0545: 1 H0551: 1, H0549: 1 H0551: 1, H0559: 1 H0559: 1, H0559: 1 H0559: 1, H0559: 1	1.
L0783: 1, L0529: 1 L0787: 1, L0665: 1 H0519: 1, S0380: 1 H0522: 1, H0436: 1 L0744: 1, L0745: 1 L0749: 1, L0748: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 H0522: 1 and H000 AR089: 10, AR06 H0549: 1, H0684: 1 H0549: 1, H0649: 1 H0551: 1, S0442: 1 H0556: 2, L0766: 1 R0393: 1, H0545: 1 H0551: 1, H0494: 1 S0222: 1, H0545: 1 H0551: 1, H0545: 1 H0551: 1, H0549: 1 H0551: 1, H0559: 1 H0559: 1, H0559: 1 H0559: 1, H0559: 1	1.
L0783: 1, L0529: 1 L0787: 1, L0665: 1 H0519: 1, S0380: 1 H0522: 1, H0436: 1 L0744: 1, L0745: 1 L0749: 1, L0748: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 H0522: 1 and H000 AR089: 10, AR06 H0549: 1, H0684: 1 H0549: 1, H0649: 1 H0551: 1, S0442: 1 H0556: 2, L0766: 1 R0393: 1, H0545: 1 H0551: 1, H0494: 1 S0222: 1, H0545: 1 H0551: 1, H0545: 1 H0551: 1, H0549: 1 H0551: 1, H0559: 1 H0559: 1, H0559: 1 H0559: 1, H0559: 1	1.
L0783: 1, L0529: 1 L0787: 1, L0665: 1 H0519: 1, S0380: 1 H0522: 1, H0436: 1 L0744: 1, L0745: 1 L0749: 1, L0748: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 H0522: 1 and H000 AR089: 10, AR06 H0549: 1, H0684: 1 H0549: 1, H0649: 1 H0551: 1, S0442: 1 H0556: 2, L0766: 1 R0393: 1, H0545: 1 H0551: 1, H0494: 1 S0222: 1, H0545: 1 H0551: 1, H0545: 1 H0551: 1, H0549: 1 H0551: 1, H0559: 1 H0559: 1, H0559: 1 H0559: 1, H0559: 1	1.
L0783: 1, L0529: 1 L0787: 1, L0665: 1 H0519: 1, S0380: 1 H0522: 1, H0436: 1 L0744: 1, L0745: 1 L0749: 1, L0748: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 H0522: 1 and H000 AR089: 10, AR06 H0549: 1, H0684: 1 H0549: 1, H0649: 1 H0551: 1, S0442: 1 H0556: 2, L0766: 1 R0393: 1, H0545: 1 H0551: 1, H0494: 1 S0222: 1, H0545: 1 H0551: 1, H0545: 1 H0551: 1, H0549: 1 H0551: 1, H0559: 1 H0559: 1, H0559: 1 H0559: 1, H0559: 1	1.
L0783: 1, L0529: 1 L0787: 1, L0665: 1 H0519: 1, S0380: 1 H0522: 1, H0436: 1 L0744: 1, L0745: 1 L0744: 1, L0745: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 L0777: 1, L0755: 1 H0444: 1, L0584: 1 H0444: 1, L0584: 1 H0444: 1, L0584: 1 H0549: 1, H0694: 1 H0549: 1, H0694: 1 H0549: 1, H0545: 1 H0556: 2, L0766: 1 H0556: 2, L0766: 1 H0550: 1, H0545: 1 H0550: 1, H0545: 1 H0550: 1, H0545: 1 H0550: 1, H0545: 1 H0550: 1, H0559: 1 H0559: 1, H0559: 1 H0559: 1, H0559: 1 H0559: 1, H0559: 1 H0559: 1, L0759: 1	1.
L0783: 1 L0787: 1 H0519: 1 H0522: 1 L0744: 1 L0744: 1 L0745: 1 L0777: 1 H0442: 1 H0422: 1 H0422: 1 H0422: 1 H0543: 1 H0556: 2 H0556: 2 H0556: 3 H0556: 1 H0551: 1 H0551: 1 H0551: 1 H0551: 1 H0551: 1 H0551: 1 H0551: 1 H0551: 1 H0551: 1	-
L0783: 1 L0787: 1 H0519: 1 H0522: 1 L0744: 1 L0744: 1 L0745: 1 L0777: 1 H0442: 1 H0422: 1 H0422: 1 H0422: 1 H0543: 1 H0556: 2 H0556: 2 H0556: 3 H0556: 1 H0551: 1 H0551: 1 H0551: 1 H0551: 1 H0551: 1 H0551: 1 H0551: 1 H0551: 1 H0551: 1	-
L0783: 1 L0787: 1 H0519: 1 H0522: 1 L0744: 1 L0744: 1 L0745: 1 L0777: 1 H0442: 1 H0422: 1 H0422: 1 H0422: 1 H0543: 1 H0556: 2 H0556: 2 H0556: 3 H0556: 1 H0551: 1 H0551: 1 H0551: 1 H0551: 1 H0551: 1 H0551: 1 H0551: 1 H0551: 1 H0551: 1	-
DHEREDHUMA EREE A SESEESELS	H0506
DHEREDHUMA EREE A SESEESELS	1
2-25 to Glu-30. 1-1 to Arg-6. 1-12 to Lys-19, 1-120 to Gly-126.	
2-25 to Glu-30. 1-1 to Arg-6. 1-12 to Lys-19, 1-120 to Gly-12	
2-25 to Glu- 1-1 to Arg- 1-12 to Lys- 1-120 to Gly	
1-1 to A 1-1 to A 1-12 to 1 1-120 to 1-120 to 1-	
2-25 	
G Physical Arian (G) Physical Ar	
7 0 0 0	
1002	
890	
39.	
103	
1217181 973342 1199232	
1217181 973342 1199232	
2 6	
HDPDE32	
円 円	
93	

-		-																											
										•																			
	-	-																											
			-					<u></u>																					
													٠.	-															
																	•												
			0.0																										
		33	-		•																							•	
		6.	4,	ຕ໌	4	ર્વ	7	4	4	ج ر	1,	Ļ	Ť,		<u>.</u>	Ļ	_	Ή,	Ή,	T,	Ļ	Τ,		· 🚅	Ţ	<u>_</u>	1,	T,	Ļ
		7, AR089:	L0666: 4, L0747: 4,	,0783: 3, L0665: 3,	.0602: 3, S0222: 2,	H0318: 2, H0553: 2,	.0763: 2,	L0662: 2,	10660: 2, H0436: 2,	L0751:	L0411:	H0265: 1, H0556:	H0685: 1, S0418:	58:	,L0717:	1, S6014:	H0486:	H0253:	L0157:	H0617:	H0494:	H0509:	\$0002:	69	L0767:	L0775:	66	F0068: 1, H0693:	20:
		, A	ដ	99	302	H0.	100	907	70H	707	5	H05	S 04	303	507	S60	70H	H02	2	HO	70H	H05	800	L0769:	207	50	L0809:	90H	H05
			4,	3	ω	4	H0135: 2, I	,0772: 2,]	ζ,	,0743: 2, 1	.2,	H	-	S0420: 1, S0358:		_	7	Ţ	-	<u>–</u>	-	_		`	·^			1,	L0352: 1, H0520:
		AR061:	99	83:	92	318	135	72:	990	43:	.0750: 2,	265	585	20:	30046:	H0351:	H0431:	H0013:	H0052:	H0271:	10090:	£0396:	10652: 1.	30426:	.0764:]	.0766:	.0806: 1,	68:	52:
		AR	<u> </u>	<u>51</u>	<u>8</u>	HO	Ħ E	LOI	ĎΉ	107	1.07	H0.	ЮH	S 04	S00	HOH	ÕH.	HO	ЭH	H0.	ЮH	HO	H	S04	107	LOJ	108	T00	E03
								~ 5																					7
٠,	o.	9	07,	Thr-165 to Tyr-172,	Thr-204 to Lys-210,	Thr-262 to Gly-271,	Thr-335 to Leu-343,	Arg-476 to Leu-482,	Ser-504 to Cys-514,	Gln-592 to Val-608,	Pro-623 to Cys-628.																		-
3-12	1e-5	r-3	/s-1	۲	-S	, K	. ਬ੍ਰੇ	ġ	.ys-	<u>/a</u> -	ys-					•			٠										
Š	o Pł	Ţ	J.	to]	to I	5	to I	toI	5	to	9																		
4 to	11 to	32 to	38 t	65	9	262	35	476	8	592	23							•								•			
Met-4 to Lys-12,	Phe-41 to Phe-50	Ala-32 to Thr-39,	Glu-88 to Lys-107,	F-1	h-2	h-2	百三	Ig-	er-5	H H	9-6		٠.																
2	ы	\ <u>₹</u>	9	<u> </u>	Ξ	[-	[∀	S	9	<u> </u>						-												_
10		1004																											
1601		10																											
\vdash		_		·										-											<u> </u>				_
99		929		•																									
. 3		46 - 1																								•			
		4																											
701		104																											
L																													
935414		1163778													-														
357		163						•																					
70																													
		X48																											
		Q																											
		HEMDX48											•																
	_																						-						
		94																											
		L.,												•								•							

		- J.				0														
	,			-										-			•		-,	
H0547: 1, S0152: 1, H0521: 1, S0404: 1, H0555: 1, S0027: 1, S0028: 1, L0779: 1, L0780: 1, L0752: 1, L0755: 1, L0731: 1, L0758: 1, H0707: 1, L0593: 1, L0603: 1, H0136: 1 and S0242: 1.		AR061: 0, AR089: 0 L0666: 4. L0747: 4.	L0783: 3, L0665: 3,	L0602: 3, S0222: 2,	H0318: 2, H0553: 2,	H0135: 2, L0763: 2,	L0772: 2, L0662: 2,	H0660: 2, H0436: 2,	L0743: 2, L0751: 2,	L0750: 2, L0411: 1,	H0265: 1, H0556: 1,	H0685: 1, S0418: 1,	S0420: 1, S0358: 1,	S0046: 1, L0717: 1,	H0351: 1, S6014: 1,	H0431: 1, H0486: 1,	H0013: 1, H0253: 1,	H0052: 1, L0157: 1,	H0271: 1, H0617: 1,	H0090: 1, H0494: 1,
	Thr-47 to Gly-56.	Ala-32 to Thr-39, Glu-88 to Lys-107.	Thr-165 to Tyr-172.	•	-										•		8	•		
	1602	1005																		
	1 - 321	46 - 651				٠.												,		
	702	105																		
×	521844	721150	-				-			•										·
	-	HHASB48		,																
		95											·		نني					

	· · · · · · · · · · · · · · · · · · ·			
			*	4
· · · · · · · · · · · · · · · · · · ·	_ 		: 4	
1, H0509: 1, 1, S0002: 1, 1, L0769: 1, L0775: 1, L0775: 1, L0809: 1, H0693: 1, H0693: 1, H0693: 1,	S0152: 1, S0404: 1, S0027: 1, L0779: 1,	L0752: 1, L0731: 1, H0707: 1, L0603: 1,	13, AR061: 1, S0046: 1, 1, H0036: 1, 1, S0003: 1, 1, L0766: 1, 1, L0755: 1, 1 and L0757:	1, AR089: 1, H0587: 1 1, H0590: 1,
ਜ਼ਿੰਜੀਜ਼ੀਜ਼ੀਜ਼ੀਜ਼ੀਜ਼ੀਜ਼ੀਜ਼ੀਜ਼ੀਜ਼ੀਜ਼ੀਜ਼ੀਜ਼ੀਜ਼	H0547: 1, BC H0547: 1, SC H0521: 1, SC H0555: 1, SC S0028: 1, LC	' سَا سَا سَا سَا ا	AR089: 13, S0358: 1, S H0592: 1, H H0318: 1, St H0553: 1, L H0672: 1, L L0756: 1, L	AR061: 1, AR089 H0656: 1, H0587 H0036: 1, H0590: L0143: 1, H0547:
RESCIONE:	<u>ihhho</u>	TTTT	1400年世世史75	
			*	r.s.
٠.				
, .	,		1006	1603
			- 1012	2 - 934
· · · · · · · · · · · · · · · · · · ·			326 -	515 - 152 -
·			106	703
			1104762	957664
			HLWCA17 1104762	HNTTD09
		•	96	97

							•									-						,							\neg
										٠		- 1	_						•								-	•	-
	٠						8																						
H0689: 1 and H0653: 1.		AR061: 7, AR089: 4	L0666: 4, L0747: 4,	L0783: 3, L0665: 3,	L0602: 3, S0222: 2,	H0318: 2, H0553: 2,	H0135: 2, L0763: 2,	L0772: 2, L0662: 2,	H0660: 2, H0436: 2,	L0743: 2, L0751: 2,		H0265: 1, H0556: 1,	H0685: 1, S0418: 1,	S0420: 1, S0358: 1,	S0046: 1, L0717: 1,	H0351: 1, S6014: 1,	H0431: 1, H0486: 1,	H0013: 1, H0253: 1,	Ļ	Ę	H0090: 1, H0494: 1,	÷	H0652: 1, S0002: 1,	S0426: 1, L0769: 1,	L0764: 1, L0767: 1,		L0806: 1, L0809: 1,	Ť,	L0352: 1, H0520: 1,
	·	•			-																			•					
	1604	1008				-	-						·.				C.a.	·									-		
	3 - 425	1 - 918	,																										
	704	108																_		•									
	676665	927823									-								•							ē			
		HSKDT07																					-						
		86			 .						-	-			•												<u>·</u>		

WO 01/55301 PCT/US01/01239

				9		
		•		·		
H0547: 1, S0152: 1, H0521: 1, S0404: 1, H0555: 1, S0027: 1, S0028: 1, L0779: 1, L0780: 1, L0752: 1, L0755: 1, L0731: 1, L0758: 1, H0707: 1, L0593: 1, L0603: 1, H0136: 1 and S0242: 1.	AR089: 1, AR061: 1 S0022: 1, S0028: 1 and S0260: 1.		AR061: 5, AR089: 2 S0002: 4, S0344: 3, S0278: 2, S0358: 1, H0042: 1, H0575: 1,	S0010: 1, H0373: 1, S0003: 1, H0163: 1, H0038: 1, H0616: 1, H0264: 1, H0100: 1, S0144: 1 and H0521: 1.	AR061: 2, AR089: 1 L0803: 6, L0748: 5, L0749: 4, H0424: 3, L0804: 3, L0774: 3, L0779: 3, H0213: 2, S0142: 2, L0789: 2, L0745: 2, L0731: 2,	H0294: 1, H0254: 1,
			Glu-44 to Pro-49.		Lys-50 to Gly-55, Thr-73 to Val-78, Thr-85 to Arg-91, Pro-103 to Ser-112, Leu-199 to Ser-207, Pro-209 to Ser-214.	
:	1009	1605	1010		1011	
	1 1	15 - 347	1 - 315	*	118 - 780	,
;	109	705	110		111	
	1102231	525475	967325	:	921674	
	HSRDB26		HAPBS07		HAUAII7	
·	66		100		101	

		•						,			-			*	· · · · · · · · · · · · · · · · · · ·	-:				•		7.			· · · · ·	-			
			• .									,															<u>.</u>		
H0393: 1, H0549: 1,		T0082: 1, H0052: 1,	H0150: 1, H0024: 1,	H0135: 1, H0268: 1,	H0100: 1, S0344: 1,	L0763: 1, L0769: 1,	L0662: 1, L0775: 1,	`	` 🚅	L0740: 1, L0750: 1 and	L0755:11.	AR061: 7, AR089: 4	L0803: 6, L0766: 3,	L0758: 3, L0790: 2,	L0743: 2, L0748: 2,	L0747: 2, L0750: 2,	L0779: 2, L0755: 2,	H0255: 1, H0370: 1,	H0530: 1, H0150: 1,	S0344: 1, L0763: 1,	L0769: 1, L0637: 1,	L0764: 1, L0804: 1,	L0774: 1, L0805: 1,	ئــ `	L0809: 1, L0664: 1,	L0665: 1, L0752: 1,	L0731: 1, L0681: 1 and	H0543: 1.	AR061: 2, AR089: 2
										·		Asp-40 to Arg-48,	Ser-68 to Ile-73,	Asn-79 to His-84.		•	•							-					
	•											1012							٠.										1013
			-									136 - 585																	260 - 838
											. 4	112																	113
												959953				•									-				957631
												HBCBT19		•					,					,					HBCPT10
	-							,				102													<u> </u>				103.

PCT/US01/01239

																						-		,					
												10							•				-						
S0360: 2, H0550: 2,	S0028.2 H0543.2	H0663: 1, H0638: 1,	S0376: 1, H0580: 1,	S0045: 1, H0393: 1,	H0370: 1, H0392: 1,	H0156: 1, H0618: 1,	H0318: 1, H0135: 1,	T0042: 1, H0366: 1,	S0002: 1, L0803: 1,	L0791: 1, S0126: 1,	S0037: 1, S0027: 1,	<u> </u>	L0754: 1, H0445: 1,	L0596: 1, S0026: 1 and	H0542: 1.	AR061: 794, AR089:	295	S0050: 2, S0031: 2,	S0260: 2, H0181: 1,	H0617: 1 and S0390: 1.	AR061: 113, AR089:	26	L0748: 15, L0581: 11,	H0510: 9, H0617: 9,	L0755: 7, H0484: 6,	H0673: 6, L0769: 6,	L0758: 5, S0278: 4,	H0327: 4, H0124: 4,	L0774: 4, L0526: 4,
	٠	•	-				•					-			•	Gh-9 to Gh-16,	Thr-33 to Gly-42,	Gly-94 to Gln-101,	Asp-108 to Arg-114.		Thr-1 to Ser-9,	Ser-146 to Thr-154,	Thr-200 to Lys-208.					•	
													,			1014	-				1015							•	·
			,	. ;	_	-	,		* /							3 - 503					3 - 764	***					_	•	
	*			· •									-			114					115							Θ	
									•							866258					934848								
												_	-			HBGDA14		0			HCHNJ32								
				-												104					105				-		•		

	_			- -	: *					1		- "																		
																		,												
			,																- 0,						-					
					,																									
			•				7					,																		
_									-	-																				
.3	ب	, m	'n	.2	.2	2,	.2	2,	.2	2,	2,	2,	2,	.2	7,	· . .	: 1,	: 1,	1 ,	: 1 ,	: 1,	1,	: 1 ,	- (. 1,	: 1,	Ę.	: T	: 1	
.0751: 4, H0549: 3,	H0370: 3, H0150: 3	.0771: 3, L0518:	0777:	.0759: 3, H0295: 2,	H0341: 2, H0125:	S0418: 2, H0676: 2,	H0550: 2, H0391	H0331: 2, H0559:	H0199: 2, H0424: 2,	H0529: 2,	L0517:	2, L0789:2,	J0665: 2, S0328: 2	H0696: 2, L0743:	J0753: 2, S0434:	.0596: 2, H0624:	H0584: 1, L0002:	H0657: 1, S0420:	S0376: 1, S0360:	H0637: 1, S0046:	H0574: 1, H0632:	L0623:	H0486: 1, H0156:	1, H0599:	H0253:	H0052:	T0110:	H0197:	H0083:	S0318:
4, H	. 3. H	3,1	3, L	3, H	.2, H	2, H	: 2, H	:2,H	: 2, H	: 2, H	⟨î		2, S(: 2, L	2, S(2, H	: 1, L	: 1, S	1, S(: 1, S	: 1, H	1, L	: 1, H	1, H	<u>_</u>	7	Ţ,	<u>_</u>	: 1, H	Ļ
0751	0370	0771	.0756: 3, L0777:	0759	0341	0418:	0550	0331	0199	H0509:	L0803:	.0529:	0665	9690	0753	0596	0584	0657	0376	0637	0574	.0622: 1	0486	.0021: 1	H0618:	H0390:	H0184: 1,	H0086:	H0014: 1,	H0355:
1	프	H	<u> </u>	H	正	Š	프	田	프	프	그	H	ъ	耳	Ы	ӈ	프	王	Š	프	프.	Ð.	王	Н	프	프	Ξ.	王	耳	Ξ
							·																							
				(<u>. </u>		_	•												ě								
-	-																													
				•																									•	
-	ď	-														<u> </u>														
												,													- 4					
																									-					
						,																								
_								1																						
					`																									

S0316: 1, H0687: 1, H0615: 1, H0428: 1, H0604: 1, H0181: 1, H0606: 1, H0032: 1, H0674: 1, S0036: 1, H0616: 1, H0038: 1, H0616: 1, H0087: 1, H06494: 1, S0144: 1, L0520: 1, L0763: 1, L0520: 1, L0763: 1, L0772: 1, L0768: 1, L0772: 1, L0768: 1, L0775: 1, L0607: 1, L0519: 1, L0543: 1, L0519: 1, L0543: 1, H0539: 1, S0052: 1, S0374: 1, H0689: 1, H0539: 1, S0052: 1, S0374: 1, H0694: 1, S0188: 1, H0134: 1, S0188: 1, H0134: 1, L0744: 1, L0745: 1, L0752: 1, H0595: 1, L0752: 1, H0595: 1,	H0136: 1 and H0543: 1. AR089: 1, AR061: 0 L0748: 8, L0439: 6,
	Gln-93 to Thr-99, Pro-124 to Gln-129,
	1016
	511 - 1344
	116
	931082
	HCHON59
	106

									-		*				-1			.)							*	•		
			-										*				ŀ											
L0766: 4, L0803: 4,	L0749: 3, S0358: 2,	H0574: 2, H0327: 2,	H0539: 2, L0758: 2,	S0026: 2, S0212: 1,	H0484: 1, S0354: 1,	S0046: 1, H0592: 1,	T0114: 1, H0427: 1,	H0590: 1, H0581: 1,	H0046: 1, H0081: 1,	H0015: 1, H0051: 1,	T0006: 1, H0040: 1,	H0268: 1, S0438: 1,	S0422: 1, H0529: 1,	L0763: 1, L0770: 1,	L0662: 1, L0794: 1,	L0649: 1, L0775: 1,	L0515: 1, L0792: 1,	H0520: 1, H0547: 1,	H0435: 1, S0328: 1,	S0380: 1, S0152: 1,	H0521: 1, L0356: 1,	L0747: 1, L0753: 1,	L0485: 1 and H0423: 1.	AR089: 7, AR061: 2	L0744: 3, L0766: 2,	H0402: 1 and L0754: 1.	AR089: 1, AR061: 0	1.
Glu-153 to Leu-159,	Gln-162 to Gly-168,	Ser-198 to Gly-203,	Lys-210 to Asn-215,	Gly-219 to Gln-224.			•			• .					-			1.						Glu-58 to Gly-64,	Pro-77 to Cys-93,	Pro-96 to Pro-106.	Ser-2 to His-7,	FIG-14 to Leu-20, Ala-33 to GIV-38.
																				•			÷ 1	1017			1018	
					•	,										.1	ű.		•					35 - 382		Ξ.	3-317	
-										-	-											4		117			118	
																1			-					716989			706471	*
														0				, i	•					HCUGN19			HCUGR38	
			-/										-											107			108	

<u> </u>														**************************************															\neg
										7					٠.					•					•				·
		•				٠,										·													
										-								-		•	,	х,							
																						-	• •						
_	<u> </u>		-				·	· · · · ·		-					·		3		·				-					-3	
61: 0	33	2,	.,	4	2,	7	٠٠. بــر	<u>_</u> f	4	1,	ا	Ĺ	Ť:	1,	1 and			6: 2,	7	<u></u>	स्वी	<u>.</u> .	-	بر	<u>,</u>	1,	- 	Ę,	1 and
0, AR061:	L0747: 6, H0638: 3	20758: 3, L0157:	L0764:	L0776:	H0522:	L0603:	S0358:	H0038	S0448:	L0770:	L0775:	L0791:	H0144:	H0436: 1	L0755:		11, AR061:	H0510: 2, L0666: 2,	.0740: 2, L0595: 2	H0580:	H0357:	H0013:	H0578	H0509:	L0804:	L0805:	L0527:	H0555:	L0757:
39: 0	47: 6,	8:3, I	H0529: 2, 1	.0774: 2, I		9: 2, I	~ -î	Ļ	-	Ę		+4	T	H0520: 1, I	8: 1, I	1: 1.		10:2,	0: 2, I	_	ij	1-1		- -i	<u>_</u>	÷	_	•	
AR089:	L07	L075	H052	L077	H052	L0779:	H0662:	S0222:	H0625:	L0371:	L0796:	L0809:	L0666:	H052	L0748:	L0731:	AR089:	H05	L074	H0657:	H0619:	H0632:	H0024:	H0591:	L0769:	L0774:	L0776:	H0521: 1	L0749:
																	,			7. *	٠				•	•		.**	
·o-10.					•				•				•				Leu-60 to Gln-65,	Arg-76 to Val-81		Ž.									
Ser-1 to Pro-10.											٠						60 to	76 to											
Ser-	-					:			~								Leu-	Arg-) '	<u> </u>							<u></u>		ا د
1019			÷.,											•			1020												
 			•	-			- 5.4									<u></u>	-			·	•						-1:4	ملتم	
68 - 853						•		٠									78 - 749			•									
89		·														-	78									7877	, 		
119															•		120												
28							-				-	COTT					58		-1:	· · · · · · · · · · · · · · · · · · ·		 -			• •				
8526																	883658						,						
D85	•						_										N38					:	,						
HDPND85 852628								-					•				HDPRN38				•	٠							•
															<u>×</u>	. .	_			·		· ··			- Ve 1				
109										_							110					16							

															•						•							
		•													*			-			·						•	
	111	<u> </u>						نبي							<u> </u>													
H0423: 1.	AR061: 28, AR089: 1 1.0439: 21, 1.0438: 13	H0144: 6, H0521: 6,	H0543: 5, H0013: 4,	S0003: 4, L0740: 4,	L0766: 3, L0759: 3,	L0588: 3, S0116: 2,	H0662: 2, S0358: 2,	L0738: 2, H0046: 2,	S0214: 2, H0039: 2,	H0591: 2, H0264: 2,	H0560: 2, L0770: 2,	L0764: 2, L0803: 2,	L0774: 2, L0659: 2,	L0666: 2, H0670: 2,	H0672: 2, L0743: 2,	L0749: 2, L0752: 2,	L0731: 2, L0758: 2,	H0445: 2, H0170: 1,	H0265: 1, H0583: 1,	H0657: 1, S0282: 1,	S0376: 1, S0360: 1,	H0580: 1, H0261: 1,	S0222: 1, H0586: 1,	H0497: 1, L0021: 1,	H0575: 1, H0036: 1,	H0318: 1, H0581: 1,	H0251: 1, T0115: 1,	L0040: 1, H0327: 1,
	Met-9 to Glu-16,		<u>e</u> .	<u> </u>					<u> </u>																2		,	
	1021		•			-																	•					
	157 - 603																			- 7			*			-		•
	121																											
	952610						-									,												
	HE8AM92																											
	111																										•	

PCT/US01/01239

			·	,
÷				
S0388: 1, T0010: 1, H0266: 1, H0687: 1, S0250: 1, S0022: 1, H0622: 1, S0036: 1.		r r i i i i i i	9	AR089: 10, AR061: 3 H0556: 1, S0114: 1, S0134: 1, S0360: 1, T0082: 1, H0052: 1, H0644: 1, H0551: 1, L0770: 1, L0789: 1,
				Arg-3 to Ser-15, Ser-103 to Gln-111.
	<u>;</u>			1022
				3 - 422
	•			122
				888243
				HE9RE21
3				112

<u> </u>	\neg		<u>.</u>			 -				ŧ																·		٦
																				•								
				-		¢-										,					,							-
											÷																•	
H0144: 1, H0435: 1 and	H0436: 1.	AR061: 1, AR089: 1 H0046: 5, H0040: 2.	H0519: 2, L0439: 2,	20758: 2, H0575: 1 and	F0042: 1.	AR089: 1, AR061: 1	H0624: 1, S0420: 1,	S0366: 1, H0135: 1,	H0494: 1, S0422: 1,	.0745: 1 and L0758: 1.	AR089: 23, AR061: 12	S0046: 1, H0100: 1,	H0494: 1, H0521: 1,	H0522: 1 and S0028: 1.	AR089: 7, AR061: 2	S0003: 5, S0354: 2,	S0214: 2, H0519: 2,	H0689: 2, H0522: 2,	.0748: 2, L0439: 2,	731: 2, L0759: 2,	H0171: 1, T0002: 1,	S0040: 1, H0669: 1,	S0356: 1, S0360: 1,	H0431: 1, H0586: 1,	H0574: 1, H0632: 1,	H0156: 1, H0590: 1,	F0110: 1, L0471: 1,	S6028: 1, H0628: 1,
E	HO	AA H	OH :	2	To	AR	H	SO	出	រុ	AĀ	Š	邑	HO	AF	Ñ	SO	田	ន្ន	ន	Ħ	80	80	H	田	H	0.1	S6
		Arg-1 to Lys-8.	,							1	Arg-20 to Arg-30,	Arg-74 to Lys-82.							3			•						
		1023				1024				*	1025.				1026				•									
		90 - 884				3 - 263					1 - 471				2 - 583													
		123	•			124					125				126			•										
		884009			Y	840939					856590				914083													
		HETKH30				HHAME78					HKABI68				HKMLN95			-		,		•						
		113				114					115	,			116													

<u> </u>		
-		*
		9
	19 vg	ν .
1: 1, 1: 1, 1: 1, 7: 1, 3: 1, 1: 1, 1: 1,	089.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3	
S0036: 1, H0494: 1, S0450: 1, S0144: 1, L0803: 1, L0438: 1, H0520: 1, H0547: 1, H0660: 1, S0328: 1, H0521: 1, S0434: 1, L0605: 1, L0599: 1,	AR061: 87, AR089: 61 L0803: 6, L0766: 3, L0788: 3, L0790: 2, L0747: 2, L0750: 2, L0779: 2, L0750: 2, L0779: 2, L0755: 2, H0255: 1, H0370: 1, H0530: 1, H0150: 1, L0769: 1, L0763: 1, L0774: 1, L0804: 1, L0774: 1, L0804: 1, L0776: 1, L0783: 1,	AR089: 13, AR061: S0003: 5, S0354: 2, S0214: 2, H0519: 2, H0689: 2, H0522: 2, L0748: 2, L0439: 2,
5: 1, 1, 3: 1, 1, 3: 1, 1, 3: 1, 1, 1, 4: 1, 1, 4: 1, 1, 4: 1, 1, 4: 1, 1, 4: 1, 1, 4: 1, 1, 4: 1, 1, 4: 1, 1, 4: 1, 1, 4: 1, 4: 1, 4: 1, 1, 4: 1, 4: 1, 4: 1, 1, 4:	R061: 8 L0803: 6, 0758: 3, 1 0743: 2, 1 0747: 2, 1 0779: 2, 1 10255: 1, 1 10530: 1, 1 0769: 1, 1 0774: 1, 1 0776: 1, 1 0776: 1, 1 0809: 1, 1 0809: 1, 1 0665: 1, 1	(9: 1) 33: 5, 4: 2, 1 9: 2, 3
S0036: 1 S0450: 1 L0803: 1 H0520: 1 H0660: 1 H0521: 1 L0605: 1	AR061: 8 L0803: 6 L0758: 3, L0743: 2, L0747: 2, L0779: 2, H0255: 1, H0530: 1, L0769: 1, L0764: 1, L0776: 1, L0776: 1, L0809: 1, L0809: 1, L0809: 1,	AR089: 13, AR061: S0003: 5, S0354: 2, S0214: 2, H0519: 2, H0689: 2, H0522: 2, L0748: 2, L0439: 2,
	.10.	
*	Cys-1 to Ala-10	*
	rs-1 tr	,
	ර	
	1027	1028
	- 729	- 330
	-1	43
	127	128
	\	
	959954	836701
	FA91	HNTBF75
	HMCFA91	HNH
		/1
	117	118

							·					
		,										
		-		¥	*							·
ر بر المراجعة المراج	_ે ત્વે તે તે,	S0028: 1, H0628: 1, S0036: 1, H0494: 1, S0450: 1, S0144: 1, L0803: 1, L0809: 1,	ֹ ֖֡֡֡֡֡֝֡֡֡֡֡֡֝֡֡֡֡֡֡֡֡֡֡֡֡֡֡֡֡֡֡֡֡֡֡֡֡	S0328: 1, H0521: 1, S0434: 1, L0605: 1,	1,1	AR089: 9, AR061: 7	AR061: 1, AR089: 0	L0749: 4, H0424: 3,	L0804: 3, L0774: 3, L0779: 3, H0213: 2,	S0142: 2, L0789: 2,	H0294: 1, H0254: 1,	H0393: 1, H0549: 1,
-15	· · · · · · · · · · · · · · · · · · ·	*	,	,		His-1 to Ser-8, Thr-68 to Lys-76.	Pro-48 to Ile-54.)		•	
						1029	1030					
				,		3 - 266	2 - 211					
	• • •					129	130	-				
	-				•	726460	509487	•	, · · ·			
			•			HPTGB43	HPTVL90				•	
						119	120		-			

*	-	•
H0427: 1, H0156: 1, T0082: 1, H0052: 1, H0150: 1, H0024: 1, H0135: 1, H0268: 1, H0100: 1, S0344: 1, L0763: 1, L0769: 1, L0662: 1, L0775: 1, L0805: 1, L0657: 1, L0666: 1, H0144: 1, L0740: 1, L0750: 1 and	AR089: 8, AR061: 2 L0471: 1, S0150: 1, H0435: 1, H0539: 1 and S3014: 1.	AR061: 3, AR089: 3 L0769: 5, L0752: 5, S0358: 4, H0448: 4, L0754: 4, H0052: 3, L0773: 3, L0666: 3, L0740: 3, L0750: 3, H0024: 2, H0083: 2, H0024: 2, H0089: 2, C0663: 2, L0766: 2, L0753: 2, L0766: 2, L0753: 2, L0788: 2, L0753: 2, L0588: 2, L0753: 2, H0265: 1, S0040: 1, H0583: 1,
	To the state of th	Gly-1 to Gly-6, Ser-16 to Ala-23, Thr-114 to Lys-120, Thr-274 to Ser-280, Arg-327 to Ser-337.
	1031	1032
	296 - 634	1 - 1011
	131	132
		992469
·	HSKIA89	HTXGF27
	121	122

													T						
																			,
																			•
		-						* - 									***		
i i	•								:										
					•														
					•						•	and	-	-5				3: 1.	1.
31: 1 35: 1, 21: 1,	26: 1 14: 1 14: 1	28: 1, 69: 1, 40: 1,	38: 1,	72: 1, 74: 1	55: 1,	54: 1,	17. 1	35:1,	14: 1	31:1,	59: 1,		3. AR061:	L0748: 6, L0747: 2,	86: 1	53: 1,	70: 1,	and H0423	AR061: 2, AR089: H0586: 2, L0803: 2
H0431: , H0635: , L0021: 1	, H0036: , H0204: , H0014:	, S6028: , H0169: H0040:	, S0038:	, L0772: 1.0374:	L0765:	L0364:	L0659:	H0435:	, H0214:	L0731: 1	L07	, L0462:	3. AI	5,10	H0170: 1, H0586:	l, H0163:	,0665: 1, H0670:	and]	2, AI 2, L0
		H0015: 1 H0266: 1 S0366: 1.	H0264: 1	10494: 1 0372: 1	0644: 1,	71: 1,	0806:1,0783:1	55: 1,	H0658: 1	.0751: 1,		H0653: 1	4 I	748: (70: 1	51: 1,	55: 1,	H0660: 1)61: 586:
H0393: L0622: S0280:	H0421: H046:	H0015: H0266: S0366:	H02	H0494:	106	L0771:	L0806:	L0665:	H06	107	107	H06	AR(ì	HOI	S0051: 1	106	H06	AR061: H0586
	•							•							•				
													Pro-50 to Glv-69.	Pro-71 to Lys-80.					
													to G	5					
		,											ro-50	ro-71				•	
	•																		_
													1033)))					1034
<u> </u>										·			1146	<u> </u>			•		029
	•												3 - 11]]					1 1
	 	. ,	 ;·				,						853 -						236
													133))					134
		<u></u>	•••							,	··								
													684125						857383
		-				-		•		-			54 6						
													HW.						HWHPO29
								٠.			-		HWHHW54						HWI
		"				· · · · ·							123						124
													12					·	1

Γ				1								_																	٦
															•														
													٠							-					. •				
																					•							. •	
					•		-				• .											_	•						
	2, H0592: 1, 1, L0021: 1,	H0494: 1,	S0448: 1, L0662: 1 and	- 1	AR089: 18, AR061: 3	L0766: 4, L0666: 3,	L0758: 2,	, S0376: 1,	H0050: 1,	H0038: 1,	H0264: 1,	S0448: 1,	S0002: 1,	L0642: 1.	0659: 1. S0374: 1,	and: 1.								•	•				
	L0439: 2, H0587: 1.	L0456: 1, H0494:	S0448: 1,	L0774: 1.	AR089: 1	L0766: 4	S0278: 2, L0758:	S0358: 1,	S0010: 1,	S0003: 1,	H0616: 1, H0264:	H0100: 1,	S0344: 1,	` `	L0659: 1.	H0521: 1 and: 1	•		٠,	•				-			•	٠.	
,					Thr-29 to Gly-34,	Glu-53 to Leu-58,	Thr-66 to Thr-74.				•		•	•			*	•							-				
					1035																-								
	,		•		184 - 459.									:	ů.			-											
	-				.135										•												٠	÷	
					967326								•													•			
					HWLPR94																								_
					125										•								~						

-	
<u>.</u>	
•	

WO 01/55301		PCT/US01/012
	*	
-	· · · · · · · · · · · · · · · · · · ·	
	4.	
	· · · · · · · · · · · · · · · · · · ·	· ·
		,
·		
	6	
	·	
•		
	·	

				٠.	•																								
																											•		
141750,	141800,	141800,	141800,	141800,	141850,	141850,	141850,	141850,	141850,	156850,	186580,	191092,	600140,	600273,	601313,	601785						-							
																•													
9 16p13.3	•																				- 1								
	ς,	•		٠.	•							•	•	•	•		•	•	•		•	1 and		1: 9	ત્	٠.	<u>_</u> ,		
AR089: 16, AR061:	L0439: 3, S0360: 2,	H0615: 2, L0770: 2,	L0666: 2, L0438: 2,	L0749: 2, L0758: 2	L0596: 2, H0294: 1	H0351: 1, S0222: 1	H0441: 1, H0611: 1	H0599: 1, H0251: 1	H0046: 1, H0567: 1	H0081: 1, H0083: 1	H0213: 1, H0617: 1	L0055: 1, H0494: 1	H0560: 1, L0769: 1	L0761: 1, L0766: 1	L0649: 1, L0774: 1	L0775: 1, L0375: 1	L0805: 1, L0657: 1	L0526: 1, L0789: 1	L0665: 1, H0519: 1	H0658: 1, S0380: 1	L0748: 1, L0786: 1	L0777: 1, L0731: 1	H0543: 1.	AR089: 12, AR061:	S0360: 2, H0550: 2,	S0028: 2, H0543: 2	H0663: 1, H0638:	S0376: 1, H0580: 1	S0045: 1, H0393: 1
Arg-11 to Pro-19,	Pro-36 to Asp-44,	Lys-183 to Gly-189,	Thr-201 to Arg-207.									•									•								
1036																			•	-				1037		1	-		
1 - 750																								55 - 363	*				
136															9					-5				137					
925331						*															-			957630					
HWLUL28														,				•				,		HWLXT48	 - 			_	,
126			,																					127					

																						·	
		<u>-</u>												•			,			·			
H0370: 1, H0392: 1,	H0156: 1, H0618: 1, H0318: 1, H0135: 1,	T0042: 1, H0366: 1,	S0002: 1, L0803: 1, L0791: 1, S0126: 1,	S0037: 1, S0027: 1,	Ť	L0754: 1, H0445: 1,	L0596: 1, S0026: 1 and	- 1	AR089: 0, AR061: 0	HU01/: 4 and 50026: 1.		AR089: 1, AR061: 0	AR089: 1, AR061: 0 S0044: 1 and S0028: 1.		AR061: 1, AR089: 1	H0246: 4, S0028: 3,	H0197: 2, S0282: 1,	H0199: 1 and 55020: 1.		AR061: 5, AR089: 2 H0294: 1, S0044: 1 and	S0028: 1.		AR061: 6, AR089: 3
*	-		-						Gly-1 to Ser-6.		His-53 to Arg-61.	His-8 to Gly-18.		Gly-23 to Gly-28, Arg-73 to Asn-78.	Pro-52 to Ala-57.	Tyr-110 to Lys-122.				9		His-49 to Lys-54.	Gln-130 to Asp-135,
								•	1038		1606	1039	1040	1607	1041				1608	1042		1609	1043
		,							1 - 567		3 - 323	7-327	2 - 640	2 - 433	2 - 1012				122 - 658	510 - 1		65 - 283	291 - 839
	1		-						138	•	902	139	140	707	141	ı	••	•	708	142		402	143
		'. ine					 		1103922		786307	789744	 1103672	730927	1103524	 			823083	1105422		866274	1152110
		٠							HBGMD15			HNGMA91	HSLEI57		HSI FE21					HSLIE40			HTXHA35
						•			128			129	130	9	131					132			133

			,,,,,				•		•										-	-	-	7.	•				4	
														•				· <u>·</u>		-	8		-	-				
	•	•					9		-																			·
H0124.2 H0135.2	H0265: 1, S0134: 1,	H0657: 1, SU280: 1, H0122: 1. H0618: 1.	H0251: 1, H0090: 1,	H0646: 1, H0144: 1,	L0743: 1 and L0748: 1.		AR089: 6, AR061: 6	S0132: 1, H0038: 1 and	L0439: 1.			AR089: 1, AR061: 0	L0439: 2, H0506: 2,	S0354: 1, S0358: 1,	S0280: 1, H0622: 1,		S0344: 1, H0658: 1,	H0539: 1, H0521: 1,	H0522: 1, H0555: 1,	_	L0753: 1 and L0596: 1.				-			
Acn-167 to I en-178						Gly-75 to Cys-83.				Met-104 to His-110,	Arg-202 to Pro-214.	Ser-28 to Pro-34,	Pro-134 to Ser-139,	Gln-178 to Gly-183,	Thr-193 to Gly-198,	His-244 to Gly-257,	Asp-263 to Tyr-273.					Ser-28 to Pro-34,	Pro-134 to Ser-139,	Gln-178 to Gly-183,	Thr-193 to Gly-198,	His-244 to Gly-257,	Asp-263 to Tyr-273,	Lys-337 to Arg-347,
						1610	1044			1611		1045					•					1612					•	
						247 - 501	157 - 810	*		157 - 810		2 - 1015				*-				•		2 - 1237	,			,		
					-	710	144	•		711		145										712			-			
						633682	1105538			953351		1167313			•							922414						
							HAICS07					HBKDN33						0.	Ç.									
			V				134					135				•												

																									_				_ _
								·					•										•					-	
														· 	·								<u>-</u>						_
														•								•							
								•																		T.			
		0	•															_	, -					-					
-			H0046: 5, L0769: 5,	L0755: 4, L0758: 4,	H0581: 3, L0803: 3,	L0774: 3, L0600: 3,	L0427: 2, S0358: 2,	H0253: 2, H0252: 2,	H0553: 2, H0087: 2,	S0038: 2, L0517: 2,		L0756: 2, L0777: 2,	H0170: 1, H0265: 1,	H0650: 1, H0657: 1,	S0116: 1, S0442: 1,	S0354: 1, H0370: 1,	H0486: 1, H0013: 1,	H0349: 1, H0706: 1,	H0618: 1, H0327: 1,	H0373: 1, H0428: 1,	S0364: 1, H0124: 1,	H0100: 1, L0770: 1,	L0637: 1, L0761: 1,	L0372: 1, L0800: 1,	L0641: 1, L0768: 1,	L0794: 1, L0766: 1,	L0657: 1, L0635: 1,	L0542: 1, L0809: 1,	L0789: 1, L0666: 1,
Pro-366 to Lvs-372,	Ala-382 to Asp-387.	Gln-10 to Gly-15,	Lys-193 to Ser-199,	Asp-323 to Tyr-332,	Leu-425 to Gly-431,	Lys-470 to Ala-477.	=						•																
		1046		•																									
		- 1729						•																	•				
		293																											-
		146			•										٠				•			,							
		1228278							ů.																	-			
*		НВО ДН62			-							·		•						-									
		136						,			X		-	-					į										

	\neg	,	\neg		٦				
,									•
									•
					-				·
*									•
	İ								
. · ·		• 1			4	4 _			
10665: 1, H0144: 1, H0682: 1, H0651: 1, 10380: 1, H0555: 1, 10439: 1, L0750: 1, 10780: 1, L0759: 1, 10366: 1, H0543: 1 and H0506: 1.		1: 4 :1, 1, 35:1		1: 1 589:		AR089: 25, AR061: 24 H0521: 2, H0580: 1, H0393: 1, H0052: 1, H0081: 1, L0774: 1 and S0152: 1.		4: 0: 1,	:: 2, 1, 75: 1.
L0665: 1, H0144: 1 H0682: 1, H0651: 3 S0380: 1, H0555: 1 L0439: 1, L0750: 1 L0780: 1, L0759: 1 L0366: 1, H0543: 1 H0506: 1.		AR089: 6, AR061: 4 S0420: 1, H0052: 1, H0024: 1, H0649: 1, H0689: 1 and H0435:		.R089: 3, AR061: 1 H0305: 2 and H0589:		AR089: 25, AR061: H0521: 2, H0580: 1 H0393: 1, H0052: 1, H0081: 1, L0774: 1 s S0152: 1.		9, AR054: 3, AR050:	AR051: 1 H0574: 2, H0510: 2, H0549: 1, H0331: 1, S0010: 1 and L0775: 1
H, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10		6, A 1, H(1, H0		3, A 2 an		25, 7 2, H 1, H0 1, L0		3,4	2, H 1, H0
L0665: 1 H0682: 1 S0380: 1 L0439: 1 L0780: 1 L0366: 1 H0506: 1		989: 420: 124: 1 189: 1		AR089: H0305: 1.		AR089: H0521: H0393: 1 H0081: 1		AR061: AR089:	AR051: H0574: H0549: 1
L0665: 1 H0682: S0380: 1 L0439: 1 L0780: 1 L0366: 1 H0506:		AR(SO HOO HOO		AR(H0 1.		AR(H03 H00 H00 S01		AR(ARC HOS S00
		60.	48.			٠.			
		-8, Sp-1	sp-1	s-57.	3-58.	y-73, u-87	y-73, u-87	n-28 r-40,	т-66.
		Asp to A	to A	i 田 o	o His	5 5 5 5	5 9 2 9	to G	to Ty
		Gin-1 to Asp-8, Lys-142 to Asp-160.	Lys-130 to Asp-148.	Ser-44 to His-57.	Ser-45 to His-58.	His-68 to Gly-73, Glu-81 to Glu-87.	His-68 to Gly-73, Glu-81 to Glu-87.	Arg-19 to Gln-28, Glu-35 to Ser-40,	Gly-60 to Tyr-66.
	_	<u>g</u> 2	Ly	Ser	Se	H G	田田田	सु छ	ৰ্ভ
	1613	1047	1614	1048	1615	1049	1616	1050	
	16	10	1	11	1	1	10) ,	· · · · · · · · · · · · · · · · · · ·
	8	71	536	66	8	16	16	1236	
	3 - 290	2 - 571	3 - 5	3 - 659	1 - 360	43 - 597	43 - 597	499 - 1	·
	Ĺ					4	4	4	
	713	147	714	148	715	149	716	150	-
			<u> </u>		L				
	742827	1157810	930790	3995	529230	2322	852622	1203140	
*	74,	T	93(110	52	118	85.	120	
		144		HCWCM65 1105668		HDQDY52 1182322		A32	
		HCEP144		SWC		<u>Q</u>		HEEAA32	
*		二		Ħ		田		H	
*		137		138		139		140	
		I .		1		1		j	

																										_
								•		3				-		·	*			-			e			*
								•							,								•			
		AR089: 2, AR061: 2 H0620: 2, H0550: 1,	H0529: 1, L0775: 1,	AR061: 12, AR089: 6	L0766: 4, H0617: 3,	H0135: 3, L0769: 2,	L0438: 2, H0265: 1,	S0282: 1, H0662: 1,	S0358: 1, S0360: 1,	S0045: 1, H0431: 1,	L0586: 1, H0575: 1,	H0620: 1, S0048: 1,	H0428: 1, S0366: 1,	H0509: 1, L0763: 1,	L0796: 1, L0764: 1,	L0774: 1, L0805: 1,	L0776: 1, L0783: 1,	L0789: 1, L0664: 1,	L0665: 1; L0565: 1,	L0758: 1 and S0424: 1.		AR089: 0, AR061: 0	S0222: 2		AR089: 4, AR061: 1	HOU46: 5, LU/09: 5,
	Leu-8 to Lys-14, Asp-53 to Gly-58, Met-76 to Asp-82	Asn-1 to Thr-7.				•										٠						Gln-31 to Pro-46.			Val-94 to Glu-99,	Arg-10/ to Thr-112,
	/191	1051		1052															•	•	1618	1053		1619	1054	
	3 - 407	1 - 684		56-1117								•									56 - 1117	111 - 449		2 - 265	3 - 1994	
	717	151	<u>-</u>	152						•			•								718	153		719	154	
	887490	839719		1104119																	923824	1104964		933802	1227613	
_		HEGAN70		HFKMF42													81					HFPHG06			HHEMB89	
-		141		142	<u> </u>	-																.143		-	144	

							<u>.</u>				;				-								: _		-					
							•	•	٠.																			3		
	•		•		•				• •								<u>*</u>				-					Θ				
		X	,																			-				-				
LV/30: 4,	3. L0803: 3,	3, L0600: 3,	358: 2,	2, H0252: 2,	2, H0087: 2,	2, L0517: 2,	748: 2,	L0777: 2,	0265: 1,	0657: 1,	S0442: 1,	0370: 1,	0013: 1,	H0706: 1,	0327: 1,	0428: 1,	H0124: 1,	l, L0770: 1,	L0761: 1,	L0800: 1,	L0768: 1,	L0766: 1,	L0635: 1,	L0809: 1,	L0666: 1,	H0144: 1,	0651: 1,	H0555: 1,	L0750: 1,	1.0759: 1
LO / 22: 4, L	H0581: 3, L	L0774: 3, L	L0427: 2, S0358: 2,	H0253: 2, H	H0553: 2, H	S0038: 2, L	L0438: 2, L0748:	L0756: 2, L	H0170: 1, H0265:	H0650: 1, H0657:	S0116: 1, S(S0354: 1, H0370:	H0486: 1, H0013:	H0349: 1, H	H0618: 1, H0327:	H0373: 1, H0428:	S0364: 1, H		₩,			L0794: 1, L	1,	L0542: 1, L	<u>_</u>	L0665: 1, H	H0682: 1, H0651	S0380: 1, H	L0439: 1, L	T.0780: 1 T.
er-584.													•		٠.	. •		٠.						۰.						
Lys-5/8 to Ser-584.																			٠					1.						
	Ţ.			-							1.				-					•		· · · · ·								-
	-	0													•				•											
										-		•		•								_					:		3	
																*	,								:		*	•		
									•	-		•																•		
		<u> </u>				<u>_</u>												•					·						-	

					,		~							:				*						
•									*					-		•							-	
L0366: 1, H0543: 1 and H0506: 1.		AR061: 2, AR089: 1 H0574: 2, H0510: 2,	H0549: 1, H0331: 1, S0010: 1 and L0775: 1.	AR061: 13, AR089: 0	L0803: 10, L0774: 9,	L0//5: 6, L0651: 4,	H0632: 1, H0156: 1,	L0021: 1, H0015: 1,	H0388: 1, H0509: 1,	L0375: 1, L0790: 1,	L0748: 1 and L0749: 1.		AR061: 9, AR089: 2	H0510: 3, L0393: 1,	HUSSS: 1 and LUSSI: 1.				AR089: 22, AR061: 7	H0483: 1, H0052: 1,	H0553: 1 and S0216: 1.		AR061: 0, AR089: 0	H0171: 1, T0042: 1 and S0031: 1.
		Leu-1 to Glu-6, Arg-10 to Gln-19.		Gln-1 to Cys-12.								Asp-60 to Lys-65.	Asp-49 to Gly-55,	Pro-73 to Thr-80,	Inr-98 to Pne-103.	Asp-41 to Gly-47,	Pro-65 to Thr-72,	Thr-90 to Phe-95.	Pro-51 to Phe-58.					
	1620	1055		1056								1621	1057	•		1622			1058			1623	1059	
	1 - 465	2 - 595	•	1 - 1026								2 - 946	3 - 539			1 - 444			524 - 3			365 - 889	1 - 744	
	720	155		156				٠				721	157			722			158			723	159	
	574897	466567	-	1106225						,		969544	1107517			837030			1103943			966754	1128288	
		HLDPC46		HLDRG44							v		HLICR73						HNHOP64 1103943				HSDEF56	
		145	•	146									147						148				149	

		•		٠												0				٠				•	· ·		
			•			 :		*									٠			-			-		ı	,	
	AR061: 5, AR089: 3	L0758: 6, L0439: 5,	L0794: 4, L0805: 3,	L0438: 3, S0116: 2,	H0574: 1, N0006: 1,		L0809: 1, L0756: 1 and	L0753: 1.		AR089: 2, AR061: 1	L0803: 12, S0358: 2,	L0748: 2, H0643: 1,	H0494: 1, L0065: 1,.	L0800: 1, L0774: 1,	L0657: 1, S0152: 1 and	L0/55: I.			AR061: 2, AR089: 2	H0575: 6, H0042: 2,	H0024: 2, L0774: 2,	L0750: 2, L0599: 2,	H0549: 1, H0375: 1,	H0647: 1, H0646: 1,	L0806: 1, L0791: 1 and	L0779: 1.	AR061: 2, AR089: 1
Pro-74 to Lys-84, Gln-107 to Trp-113.	Asp-1 to Arg-7,	Glu-149 to Cys-156,	Tyr-212 to Trp-228,	Ala-305 to Glu-311,	Leu-367 to Arg-375.				Asp-1 to Arg-7.	Thr-95 to Gly-106,	Pro-188 to Ser-193.						Thr-95 to Gly-106,	Pro-188 to Ser-193.	Gly-48 to Glu-54,	Pro-107 to His-112,	His-122 to Ala-128,	Arg-225 to Gly-232.		-			Arg-57 to Gln-76,
1624	1060								1625	1061							1626		1062					•			1063
2 - 490	3 - 1172								3-1172	2 - 652							2 - 652		1 - 864		8			3			617 - 3
724	160					-		-	725	161				•			726		162			•					163
496551	1105518								954519	1106729			-				970613		972037								1192885
	HTENI29									HWMKD72				,		3			HAPSQ21								HLJDW02
	150									151		,							152					_			153

								,	 -							-				_ _	-					•	<u> </u>
				- 1			0				<u></u>						_								4		
-							į																				
H0549: 1, H0575: 1, H0375: 1, H0647: 1, L0774: 1 and L0779: 1.			10, AR051: 2, AR089:	2, AR061: 0	L0439: 23, L0748: 18,	L0438: 17, L0749: 10,	L0794: 7, L0805: 6,	L0740: 6, L0777: 6,	H0013: 5, H0052: 5,	L0770: 5, L0731: 5,	L0803: 4, L0754: 4,	L0750: 4, L0779: 4,	L0752: 4, S0040: 3,	H0551: 3, H0494: 3,	H0538: 3, L0776: 3,	L0809: 3, S0126: 3,	S0378: 3, L0742: 3,	L0747: 3, L0755: 3,	S0222: 2, S0010: 2,	H0327: 2, H0545: 2,	H0266: 2, L0351: 2,		L0774: 2, L0806: 2,	L0665: 2, S0028: 2,	L0744: 2, L0745: 2,	L0756: 2, L0753: 2,	L0757: 2, L0758: 2,
Glu-86 to Cys-98, Pro-112 to Cys-122, Ser-132 to Gly-143.		Asp-1 to Gln-9,	Leu-45 to Lys-62,	Thr-69 to Glu-74,	Pro-189 to Trp-194,	Ile-205 to Leu-210,	Tyr-217 to Ser-222,	Ser-249 to Asp-256,	Thr-311 to Tyr-317,	Arg-344 to Ile-349.	-			•					•								
	1627	1064		0.	_			9																			
	2-517	3 - 1163		•		•			9 - 5 - 10																		8
	727	164	,						121												70						
	837592	1205666																			٠.						
		HMGBT01																			٠.						
		154								-			-	•													

														_															
											•																		
						<u>. </u>	_																·						
				·			1+0												-										g
7	رح)		. T	Ļ	H	Ļ	: 1,	. 	, , ,	. 1,	. T	Ļ	<u>-</u> ;	μí.	–	Ţ,	1,	Ļ	Ť,	Į,	Ļ	,	Ę	.	٦,	<u>,</u>	1,	Ę	1, H0653: 1, 1, H0506: 1 and
331:	L0592:	S6024:	1, H0381	580:	S0300:	H0333:	H0156:	H0251	.0471:	H0051:	H0284:	S0036:	H0591	H0268:	S0038:	S0002:	L0520:	L0767:	L0775:	L0515:	L0787:	L0790:	L0352:	H0521	S0027:	L0743:	L0780:	L0596:	H0653: H0506:
800	100	, S6	뭐,	1, H0580:	SS.	H	HO,		ន្ទ	H,	出	Š.	H,	, H0		200	Š	S	Š	S	2	2	3	H,	SS.	Š	2	3	HOH
9:2	0: 2,	1:1,		1:1,	3:1	6: 1,	0:1,	9: 1	0:1	0:1	7:1	8: 1	5: 1	-	7	2: 1,	8: 1,	4: 1,	4: 1,	1:1,	3: 1,	8: 1,	3: 1	. 1. . 1.	6: 1	1: 1,	1: 1,	5: 1	1: 1, 2: 1,
L0759: 2, S0031:	S0260: 2,	H0171:	H0650:	S0001: 1	H0393:	S6016:	H0270:	H0599:	H0050:	H0620:	H0267:	H0628:	H0135:	H0264:	H0412:	S0112:	L0598:	L0764:	L0804:	L0651:	L0783:	L0788:	H0693:	H0648:	:9690H	L0741: 1	.0751:	H0445:	L0581:] S0192: 1
ř	<u>.</u>	<u>;II</u>	щ	S	ഥ	S	프	프	耳	프	Œ	프	Œ	正	Έ.	S	ㅂ	<u> </u>	ᆸ	브	<u>고</u>	,므.	Œ	正	E	<u> </u>	ᆚ	프	<u> </u>
			. *																										
		•									•									•									
						•	-										٠.	•	•	•				•					
																					•								
														•			•												
					-																								
													•	•											•				
L		·						•			:					•							:_						
												-																	
L		•																											
					¥ť.	•									•														
						٠																		•					
┝																							-		-		_		
_																													
																									٠				
													•																
					•																								
-	_																												

																										•	1		·
•		•																						٠		•			
				•	•	*			3	•		·											•	•	. •				
H0352: 1.		AR061: 4, AR089: 0	L0439: 23, L0748: 18,	L0438: 17, L0749: 10,	L0794: 7, L0805: 6,	L0740: 6, L0777: 6,	H0013: 5, H0052: 5,	L0770: 5, L0731: 5,	L0803: 4, L0754: 4,	L0750: 4, L0779: 4,	L0752: 4, S0040: 3,	H0551: 3, H0494: 3,	H0538: 3, L0776: 3,	L0809: 3, S0126: 3,	S0378: 3, L0742: 3,	L0747: 3, L0755: 3,	S0222: 2, S0010: 2,	H0327: 2, H0545: 2,	H0266: 2, L0351: 2,	L0800: 2, L0768: 2,	L0774: 2, L0806: 2,	L0665: 2, S0028: 2,	L0744: 2, L0745: 2,	L0756: 2, L0753: 2,	L0757: 2, L0758: 2,	L0759: 2, S0031: 2,	S0260: 2, L0592: 2,	H0171: 1, S6024: 1,	H0650: 1, H0381: 1,
-	-	Leu-6 to Gln-12,	Leu-48 to Lys-65,	Thr-72 to Glu-77,	Pro-192 to Trp-197,	Ile-208 to Leu-213,	Tyr-220 to Ser-225,	Ser-252 to Asp-259,	Thr-314 to Tyr-320,	Arg-347 to Ile-352.					-				-		•					•		,	
7	1628	1065		-							9				-		-	•								•			
	3 - 395	2 - 1171									_											<u> </u>	0						*
	728	165								•																			
	879904	1178041						•											-										
		HSSJJ24									-																		
		155								•				•															

		301220,
1	-	Xp21.1
S0001: 1, H0580: 1, H0393: 1, S0300: 1, S6016: 1, H0333: 1, H0270: 1, H0156: 1, H0599: 1, H0251: 1, H0620: 1, L0471: 1, H0620: 1, H0284: 1, H0628: 1, S0036: 1, H0135: 1, H0268: 1, H0264: 1, H0268: 1, H0264: 1, L0769: 1, L0764: 1, L0775: 1, L0788: 1, L0775: 1, L0788: 1, L0787: 1, H0693: 1, L0352: 1, H0698: 1, L0787: 1,	તેન ે ને ને ન	AR061: 3, AR089: 1
		Asp-1 to Gin-9. Cys-33 to Tyr-39.
		188 1629 371 1066
		729 3 - 1 166 54 - 3
		905092 7 669383 1
		HFTCG46
	;	156

						•						سأناف																	
302350,	306400,	309470,	309585,	311250,	312040,	312610,	314850	104770,	107670,	110700,	135940,	145001,	146790,	152445,	152445,	159001,	174000,	179755,	182860,	182860,	182860,	191315,	230800,	230800,	266200,	600897,	601105,	601412,	601652,
					<u> </u>			1921							Ŷ										-3-3				
L0777: 2, H0123: 1	and L0747: 1.	2	,			*		AR089: 5, AR061: 3 10	L0809: 1 and H0520:					•	-	000				•									
	_ ಡ							Ala-8 to Gly-14,	His-44 to Ser-50,	Tyr-70 to Thr-75,	Ser-98 to Pro-113,	Arg-119 to Phe-124,	Ser-137 to Glu-154.																
								1067																					
								1 - 492		.8																			
					*			167											٠							,			
		_					-	929511			,																		
						•	٠	HNTMD81									*												
								157																					

602491														-					•	-				
																							*	
	AR089: 1, AR061: 1 S0028: 5, S0050: 3, L0591: 3, H0381: 2,	H0623: 2, S0031: 2,	S6024: 1, H0255: 1,	S0278: 1, H0013: 1,	S0280: 1, L0105: 1,	H0271: 1, H0687: 1,	H0634: 1, S0142: 1,	S0126: 1, S0152: 1 and	S0027: 1.		AR089: 2, AR061: 1	S0028: 5, S0050: 3,	L0591: 3, H0381: 2,	H0623: 2, S0031: 2,	S6024: 1, H0255: 1,	H0305: 1, S0045: 1,	S0278: 1, H0013: 1,	S0280: 1, L0105: 1,	H0271: 1, H0687: 1,	H0634: 1, S0142: 1,	S0126: 1, S0152: 1 and	S0027: 1.	AR089: 15, AR061: 6 S0260: 1 and L0581: 1.	
	Gly-24 to Lys-36.				-			****			Ala-6 to Tyr-11,	Gly-21 to Lys-33,	Pro-54 to Trp-61,	Ala-69 to Ile-75.										Asn-42 to Gly-47, Lys-55 to Ala-62.
	1068		•							1630	6901										•		1070	1631
	2 - 1075					•			- }	2 - 265	1 - 348						0	•				-	353 - 3	1 - 297
	168		ā			9	9			730	.169												170	731
	1174334									573965	665905			-									1128095	764970
	HBSAJ60										HSKCI43			*				-					HSDKE47	
	158									-	159												160	

						•																					-	
				,				*				·															,	
AR061: 5, AR089: 4	HUSUS: 2 and fruses.		AR061: 7, AR089: 2	S0045: 2, S0028: 2,	S0046: 1, S0222: 1,	L0477: 1, H0042: 1,	S3012: 1 and S0031: 1.		AR061: 1, AR089: 1	H0254: 2, H0255: 1,	H0617: 1 and S0126: 1.	AR061: 982, AR089:	280	L0527: 2, H0208: 1,	H0635: 1, S0250: 1,	H0622: 1, H0551: 1,	L0766: 1, H0519: 1,	H0521: 1, S0027: 1 and	H0136: 1.	AR061: 1, AR089: 0	L0774: 3, H0068: 2,	L0622: 1, H0119: 1,	H0509: 1, L0775: 1,	L0776: 1, L0666: 1,	S0028: 1, L0758: 1,	S0260: 1 and S0396: 1.	-	
1071 Leu-4 to Pro-10,	Ser-13 to Ser-20.		Ala-72 to Asn-79,	Asp-206 to Gly-211.				Ala-64 to Asn-71.			3	Pro-28 to Lys-33,	Pro-111 to Gln-116,	Phe-161 to Ser-167,	Pro-289 to Phe-301,	Ser-305 to Asp-314.				Glu-47 to Thr-52.							Arg-1 to Leu-6,	Pro-47 to Arg-52.
1071		1632	1072				-	1633	1073			1074		•						1075							1634	
400 - 2	,	2 - 346	370 - 1149		•			3 - 590	44 - 583	··.,		1617 - 190		,						1 - 366							2-619	
171		732	172					733	173			174								175							734	
1172460	·	853009	1144027					954892	954893			956315								1209021							865314	
HCWTB56 1172460			HFPBS73		÷				HOEDD44			HSUAN33								HBCMD49							7	-
161			162			0			163			164								165					,			

				•		_	-										. 1				_
							:												,		
	-							_			·										-
									-			٠									
AR089: 12, AR061: 6	AR089: 1, AR061: 1 H0624: 2, S0001: 2, L0005: 1, S0045: 1, H0619: 1, H0191: 1,	S0144: 1, S0428: 1 and S0031: 1.	AR089: 22, AR061: 9	L0748: 13, H0457: 9,	L0766: 5, L0758: 5,	S0358: 4, L0774: 4,	H0144: 4, L0749: 4,	L0777: 4, H0014: 3,	L0662: 3, L0775: 3,	L0776: 3, L0743: 3,	L0747: 3, L0581: 3,		L0640: 2, L0659: 2,	L0526: 2, L0809: 2,	S0126: 2, H0696: 2,	L0439: 2, L0746: 2,	L0750: 2, L0753: 2,	H0295: 1, S0134: 1,	S0212: 1, S0376: 1,	S0045: 1, H0619: 1,	HU201: 1, HU33U: 1,
	His-40 to Asn-46, Ser-101 to Lys-107, Ile-179 to Arg-184, Trp-223 to Cys-230,	Fne-300 to Fne-300, Lys-353 to Gly-360, Leu-477 to Arg-490.	Gly-21 to Pro-27,	Gln-62 to Asp-67,	Asn-11 / 10 Leu-124, Arg-131 to Phe-138.) .			•												
1076	1077	1635	1078																	•	
900 - 478	1156 - 2640	7, 573	1686 - 2108									· · · · · · · · · · · · · · · · · · ·									
176	17.7	735	178																		
956826	1228291	985000	1204710			36					-			•		•		•			
HKABN12 956826	НМОАС31		HMVBQ92					TO THE STATE OF TH								*	•				_
166	167		168	,																	_

					×.
-		-			
	H0188: 1, H0687: 1, H0169: 1, H0090: 1, H0591: 1, T0067: 1, H0488: 1, L0374: 1, L0648: 1, L0551: 1, L0376: 1, L0807: 1,	الم المالية	H0555: 1, H0436: 1, S0028: 1, L0752: 1, L0755: 1, L0759: 1 and S0192: 1.		AR061: 7, AR089: 5 L0748: 13, H0457: 9, L0751: 7, L0665: 6, L0766: 5, L0758: 5, S0358: 4, L0774: 4, H0144: 4, L0779: 4, L0777: 4, H0014: 3, L0662: 3, L0775: 3, L0776: 3, L0775: 3,
					Gly-21 to Pro-27, Gln-62 to Asp-67, Asn-117 to Leu-124.
	*			1636	1079
			eti)	2 - 295	1670 - 2092
		•		736	179
		<u> </u>		791284	1228151
				\neg	HOELA62
					169

<u>. </u>											-							_										
											,																	
										_	*	<u>.</u>						<u> </u>										<u>,</u>
					-																							
	•																•						*.					
							· · ·																			·		
			•			•			•	•	•	•	•		•		•	•	٠		±		•	•				and
51: 5, 52: 2,	59: 2,		96: 2,		53: 2,	34: 1	76: 1,	19:1	50: 1	31:1	27:1	85: 1	H0046: 1	57: 1	10:1	87: 1	90:1	67: 1	74: 1	51: 1,	07:1,	91:1,	47:1	60: 1	39: 1	36: 1	L0752: 1,	L0759: 1
,0/4/: 3, LU38I: ,0600: 3, H0052:	L0659:	L0809:	H0696:		L0753:	, S0134:	, \$0376:	S0045: 1, H0619:	H0261: 1, H0550:	, H0331:	, H0427:	, H0085:		1, H0057:	H0510:	, H0687:	1, H0090:	, T0067:	, L0374:	L0551:	L0807:	L0791:	.0666: 1, H0547:	, H0660:	, H0539:	H0555: 1, H0436: 1	_	L07
	,0640: 2,	26: 2,	6: 2,	39:2,	.0750: 2,	95: 1, 9	2: 1,	15: 1,	51: 1	33: 1,	_	H0575: 1,	24:1	12: 1,	11:13	88: 1	59: 1,	91: 1,	88: 1	18 : 1,	6: 1,	00: 1,	56: 1,	H0519: 1,	72: 1	55: 1,	S0028: 1,	55: 1,
L0/4/: 3 L0600: 3	1706z	L0526:	S0126:	L0439:	1.07	H0295:	S0212:	700S	H02	H0333:	H0486:	H05	H0204:	H0012:	S0051:	H0188:	H0169:	H0591:	H0488: 1	L0648:	L0376:	L0790:	1,066	H05	H0672:	H05	S002	L0755: 1
												•																
					•																							
•													•															
												·					- 4						_				,,-	
																				-				-				
10			-1																						-1			
		-i																			·		- :					
	٠.						÷	•						•														
				,			,																					
,																					•							
		-		_														-										

	863712	737	1440 - 1943	1637	Ser-1 to Arg-13, Glu-32 to Ser-39.			
1228152		180	1-516	1080	His-5 to Thr-13,	AR089: 15, AR061: 13		
					Leu-26 to Ser-33,	T0006: 1 and H0135:		
		-			GIN-93 to Asp-98,	Τ.		
					Asn-148 to Leu-155,			٠
		-7			Arg-162 to Phe-169.			•
967832		738	1 - 396	1638	Ser-3 to Ser-11.			
HEMFJ74 1216651		181	52 - 1368	1081	Glu-11 to Ala-41,	AR089: 16, AR061: 2		
					Pro-59 to Glu-64,	H0519: 2, S0040: 1,		
					Gly-90 to Arg-98,	S0046: 1, H0455: 1,		
					Glu-115 to Ser-121,	H0427: 1, H0599: 1,		
					Ser-150 to Gly-158,	H0052: 1, H0038: 1,		
•					Phe-186 to Thr-192,	H0551: 1, H0269: 1,		
					Asp-204 to Glu-209,	S0126: 1, H0689: 1,		
					Ser-256 to Ser-261,	H0539: 1 and L0750: 1.		
					Thr-283 to Asp-289,			
					Val-341 to Ala-352,			
					Asp-405 to Trp-422.			
523350	⊢	739	1 - 348	1639	Gly-1 to Cys-39.		•	
266929	├	182	3 - 452	1082	Phe-10 to Thr-16,	0:	5q34-q35	109690,
			·	.•	Asp-28 to Glu-33.	H0519: 2, S0040: 1,		109690,
						S0046: 1, H0455: 1,		123101,
						H0427: 1, H0599: 1,	•	164040,
						H0052: 1, H0038: 1,		180071,
						H0551: 1, H0269: 1,		208100,
		-			٠	S0126: 1, H0689: 1,		246530,
						H0539: 1 and L0750: 1.		600584
1228150	lo -	183	1 - 1110	1083		AR061: 1, AR089: 0 S0252: 5, S0268: 5,	2	
	4	-						-

•		-					
				_			
S0256: 4, S0228: 3, S0270: 3, S0258: 2, H0305: 2, L0717: 2, H0090: 2, H0521: 2, L0740: 2, L0777: 2, H0445: 2, H0657: 1, S0212: 1, H0580: 1, H0438: 1, H0486: 1, T0074: 1, H0581: 1, S0388: 1, H0266: 1,	المائد ثارث		AR061: 4, AR089: 2 L0742: 3, S0010: 2, H0650: 1, S6026: 1, H0068: 1, L0794: 1 and L0809: 1.		AR089: 11, AR061: 11 L0665: 3, S0116: 1 and H0597: 1.		AR061: 2, AR089: 1 H0662: 2, S0003: 2,
		Glu-87 to Thr-94.	Ser-13 to Leu-22, Phe-40 to Lys-45.	Ser-13 to Leu-22, Phe-40 to Lys-45.	Arg-1 to Lys-9.	Gln-59 to Ser-71.	Ser-8 to Gin-14, Asp-52 to Pro-63,
		1640	1084	1641	1085	1642	1086
		756 - 301	1121 - 66	2 - 361	3 - 551	1 - 315	3 - 1676
		740	184	741	185	742	186
		908235	1122199	509775	1102698	863846	1130816
	•		HAGBA63		HBMUG47		HCRPZ84
		-	174		175		176

	,	
S0152: 2, L0356: 2, S0356: 1, S0354: 1, S0360: 1, H0013: 1, H0581: 1, H0090: 1, H0641: 1, H0435: 1, H0648: 1, L0731: 1, S0031: 1 and H0542: 1.	AR089: 6, AR061: 2 H0589: 2	AR089: 18, AR061: 6 L0803: 5, H0640: 2, H0373: 2, H0040: 2,
Lys-172 to Lys-183, Thr-204 to Glu-210, Thr-227 to Ile-239, Ala-251 to Lys-258, Pro-276 to Glu-286, Glu-293 to Glu-304, Asn-338 to Lys-343, Asp-350 to Lys-372, Leu-374 to Asp-380, Leu-374 to Asp-380, Leu-397 to Arg-412, Tyr-419 to Ala-426, Ser-467 to Lys-479. Lys-31 to Lys-479. Thr-63 to Glu-69, Thr-63 to Glu-69, Thr-86 to Ile-98, Ala-110 to Lys-117, Pro-135 to Glu-163, Asp-209 to Lys-231, Leu-233 to Asp-239, Leu-236 to Arg-271, Tyr-278 to Ala-285, Ser-326 to Lys-338.	Ser-37 to Gly-44, Ile-46 to Glu-60. Ser-37 to Glv-44.	Pro-6 to Cys-12, Val-15 to Gly-28, Arg-45 to Pro-53.
1643	1087	1088
2 - 1252	39 - 311	2480 - 564
743	187	188
965476	1192287	1195686
	HCWTR54	HDPBB41
	177	178

				:
		i	. •	
	AR089: 1, AR061: 1 H0457: 5, L0766: 3, L0791: 2, S0420: 1, S0250: 1, L0638: 1, L0803: 1, L0806: 1, H0144: 1, H0547: 1, L0779: 1, L0485: 1 and H0423: 1.	AR089: 18, AR061: 11 H0057: 1, L0520: 1 and L0389: 1.	AR061: 4, AR089: 2 H0361: 3, S0001: 1, S0045: 1, S0278: 1, S0144: 1 and S0053: 1.	,
Asp-37 to Ile-44, Asp-47 to Thr-52, Pro-80 to Asp-85, Ala-90 to Tyr-101, Asp-138 to Glu-146, Ser-154 to Phe-161, Asn-172 to Gln-178, Gln-185 to Glu-190, Asn-205 to Ser-215.	Phe-8 to Asp-18, Pro-71 to Arg-84, Arg-90 to Asp-97, Ser-125 to Leu-133, Ala-137 to Ghr-144, Met-181 to Gly-190, Gln-193 to Ile-199.	Glu-33 to Thr-45, Arg-50 to Ser-59.		Val-2 to Val-12, Asp-20 to Glu-26, Gln-56 to Gly-61, Gly-69 to Arg-76,
1645	1089	1090	1091	1647
2 - 667	2 - 640	716 - 360	3 - 680	1 - 663
745	189	190 746	191	747
925800	907903	1151479	1182719	908374
·	HEOP132	HFSAG03	HFXCI24	
,	179	180	181	

	1			_	-		- 11				-	-						-									· · ·
			•				. (•	•															
												•	. 1	Ŷ,		•							,				
	-	<u>.</u>			-				j.			- :														استجوا	÷ 1444
									٠,											٠							
																	•	-									
·	ļ.,	····	<u> </u>			-:			E									•			. <u>.</u> .						-
	9: 2	1: 1;	L,	(T	1,	_	45: 1	1: 1	1,	H0477: 1, S0112: 1 and				:68		: I,	42: 1		9:0	سُر	2,	ત્રં	. ·	<u>_</u>	Τ,	Ţ	- ^ -^-
	4, AR089	H0556: 1, H0650:	S0001: 1, S0376:	H0574: 1, S0346:	H0328: 1, L0649:	H0689: 1, H0660: 1	and H0445:	1, AR061:	H0265: 1, H0556: 1	112:				AR061: 193, AR089:		H0265: 1, H0050: 1,	H0634: 1 and T0042:		0, AR089:	L0751: 3, L0747: 3,	H0662: 2, H0641: 2	.0749: 2, L0758: ;	638:	427:	H0424:	H0032:	1, S0450: , L0804:
	4,7	: 1,E	1, SO	1, S0	1, LO	1, HC	l and	1,7	: 1, H	1, S0	-i	4		193,		: 1, H	1 and		0,4	3, L	2, HC	2, LO	30114: 1, H0638:	l, H0	, , ,		
	AR061:	0556	001:	574:	328:	689:	.0752: 1	AR089:	0265	477:	794:			.061:		0265	634:		AR061:	3751:	662:	749: (S0114: 1	946:	H0618:	H0553:	10494: .0773: 1
	A.R.	工	Š	료	H H	田	É	A.	H	<u>H</u>	Š	1	_	AR	73	田	욢		AR	<u> </u>	Ħ E	9	80	<u>80</u>	H	H	
175,		ຕົ	4,	49,	177.			ξ,	ń	4,	112,	188.	3.	-		•			÷	_	~~	_^	110,	125,	180,	226,	37.
Lys-	rg-44	,en-9	3h-1	3ly-1	ਲੁ			Arg-2	Asn-3	Jys-8	Ser-	Thr-	vrg-2			•			'9-s	u- 16,	lis-4	/al-5/	GH-	Lys-	Gh-	Arg-	er-28
67 to 78 to	to A	5 to I	7 to (1 to (72 to			8 to /	8 to 4	9 to I	04 to	81 to	8 to 7						to H	to Le	1 to F	€ to √	03 to	19 to	73 to	[6 to	1 to 5
Gly-167 to Lys-175, Pro-178 to Gly-205	Ile-26 to Arg-44,	Ser-85 to Leu-93,	Ala-97 to Gln-104,	Ile-141 to Gly-149,	Asp-172 to Gly-177,	! *		Ala-18 to Arg-23,	Phe-28 to Asn-33,	Arg-79 to Lys-84,	Arg-104 to Ser-112,	Asn-181 to Thr-188.	Ala-18 to Arg-23.						Gln-1 to His-6,	Pro-9 to Leu-16,	Irp-41 to His-47,	His-49 to Val-57,	Arg-1	Glu-119 to Lys-125,	Gln-173 to Gln-180,	Pro-216 to Arg-226,	IIe-281 to Ser-287.
									<u></u>	7				4				6			<u> </u>		7	<u> </u>			
-	1092		•	•				1093					1648	1094				1649	1095						-		
	881		•		0		,	. 9/9		•			5	5	سجنت	1.05		5	1609	•							•
	162 - 8							2-67					-435	3 - 575				3 - 575	674 - 16								•.
	=				,		÷				<u></u>			-					19					-,			· ·
	192					•		193					748	194				749	195								
										-											_	-					
	907938							1106390		•			907951	1195070				869621	1162649			•					
<u> </u>	1	- 1				7			,			51	ठ					ŏ		17.15	-111	٠		·	1 19		·
	HFXHJ89							HHPTC55						HJBBP54				•	HKAHB56		۰.		•	•			
	自							HH			, *			HJB				*	HKA								
	182			-	<u> </u>			33				L.,,		45			-				•					<u> </u>	····
	12				V.			183						184	-				185								

																	*	•	f
													-						•
L0653: 1, L0792: 1, L0666: 1, H0689: 1, H0435: 1, H0660: 1, H0521: 1, L0752: 1, L0755: 1, L0596: 1 and H0542: 1.		AR061: 3, AR089: 1 L0748: 7, L0791: 2,	H0597: 1, H0509: 1, L0803: 1, L0804: 1 and	L0581: 1.		AR061: 8, AR089: 4	L0748: 4, H0306: 2,	L0766: 2, L0659: 2,	L0756: 2, L0758: 2,	S0134: 1, S0418: 1,		1,	Hî	S0142: 1, L0638: 1,	L0772: 1, L0800: 1,	L0768: 1, L0775: 1,	L0375: 1, L0655: 1,	L0791: 1, L0663: 1,	H0651: 1, S0330: 1, L0749: 1, L0779: 1,
Pro-57 to Gln-69.	Asn-71 to Phe-81.	Val-39 to Lys-47, Cys-81 to Trp-86,	Arg-213 to Gly-218.	**.	Val-39 to Lys-47, Cys-81 to Trp-86.	Met-59 to Lys-70,	Thr-134 to Arg-139,	Gly-211 to Tyr-216,	Asn-237 to Lys-256,	Ser-264 to Asp-271,	Ser-290 to Asp-302,	Ser-309 to Arg-315,	Asp-320 to Phe-325.			-			
1650		1096	• .		1651	1097			,										
3 - 1346	•	66 - 725			66 - 725	1 - 987					*							•	
750		196		•	751	197													
865298		1151490			831356	1165318												-11	
		HLDCI35				HMCBU79									,				,
		186				187		v											

						-																			
-																	-								
L0759: 1 and H0542: 1.		AR061: 1, AR089: 1 L0803: 5, L0665: 2,	L0438: 2, L0758: 2,	S0418: 1, L0717: 1,	H0586: 1, H0622: 1,	H0038: 1, L0662: 1,		L0790: 1, L0664: 1,	H054/: 1, H0519: 1,	HUO/2: 1, HUS39: 1,	S0152: 1, L0740: 1,	L0747: 1, L0777: 1 and	30242: I.		AR061: 6, AR089: 3	LIVOID. 3		AR089: 1, AR061: 0	S0422: 4, L0750: 4,	L0766: 3, L0794: 2,	S0242: 2, H0542: 2,	H0170: 1, S0116: 1,	H0675: 1, H0497: 1,	H0486: 1, H0013: 1,	H0090: 1, H0040: 1, H0551: 1, L0649: 1,
	Met-62 to Lys-73, Thr-137 to Arg-142.	Asn-13 to Ser-19, Ile-43 to Ser-50,	Ser-61 to Ile-66,	Lys-104 to Asn-111,	Lys-116 to Gly-125,	Trp-183 to Pro-193,	Ser-282 to Asp-294,	Ser-330 to Arg-335,	Cys-344 to GID-350.		,				Gln-15 to Lys-21,	Alg-3/ to mis-/2.	Met-1 to Arg-6, Ser-16 to Lys-29.								
	1652	1098							*				1770	1033	1099		1654	1100							
	1 - 501	913 - 2001		*									, ,	1 - 300	237 - 1		22 - 159	6901 - 99	-1						
	752	198					,							/53	199		754	200							
	856630	1199546				. •							10000	927/94	1104108		926260	1222600			- 0				
		HNTRV07		•											HODEX10			HOGAQ10 1222600		,		*			·
		188					,								189			190							

<u> </u>	·		Γ										_						**					
*													•											
		·								<u></u>														
				•		٠.											,			-				
					,																			
L0606: 1, H0519: 1, H0435: 1, L0779: 1, L0593: 1 and H0543: 1.			AR061: 3, AR089: 2	S0206: 2, L0439: 2,	S0222: 1, S0003: 1,	H0428: 1, L0766: 1 and	L0438: 1.	,			•			AR089: 2, AR061: 1	L0777: 12, L0766: 9,	L0803: 5, L0748: 5,	L0752: 5, L0758: 5,	L0759: 5, L0666: 4,	L0794: 3, L0805: 3,	L0743: 3, L0747: 3,	S0222: 2, H0457: 2,	S0003: 2, L0649: 2,	L0804: 2, L0809: 2,	L0663: 2, L0664: 2,
10	Asp-40 to Gin-60, Phe-99 to Ser-104,	Set-103 to Cut-117, Lys-123 to Lys-137, Asn-175 to Pro-181.	Arg-1 to Pro-10,	Glu-50 to Lys-59,	Thr-94 to Leu-100,	Leu-142 to Lys-148,	Glu-171 to Gln-176,	Pro-184 to Tyr-189,	Asp-261 to Val-270.	Leu-16 to Lys-22,	Glu-45 to Gln-50,	Pro-58 to Tyr-63,	Asp-135 to Val-144.	Val-41 to Asp-46,	Met-64 to Arg-70,	Arg-135 to Lys-146,	Tyr-151 to Asn-157,	Glu-167 to Ser-172.						
	1655		1101							1656				1102										
	2 - 556		1 - 927					•		1 - 549				2765 - 1203						,			·	
	755		201							756	٠			202										
	907911		982028							668774				1151310							*			
			HOSBW20				•							HRADL60	•				•					
			191							-				192	9									

					_					· · · · /**			•			1													
									•									.,				•							
					-																:				_	<u> </u>	-		
				•									٠.											,				٥	
H0539: 2, L0744: 2,	.0740: 2, L0596: 2,	.0362: 2, S0026: 2,	1, H0170: 1,	1, H0402: 1,	1, S0420: 1,	1, S0356: 1,		٠,	1, T0082: 1,	.0163: 1, H0594: 1,	1, H0416: 1,		-	1, H0163: 1,		1, H0551: 1,	1, H0538: 1,	1, L0770: 1,	1, L0764: 1,	1, L0375: 1,	1, L0659: 1,		1, T0068: 1,	1, H0684: 1,	1, H0518: 1,	S0013: 1, S0146: 1,	H0555: 1, L0779: 1,	1, L0757: 1 and	1.
H0539:	L0740:	L0362:	H0624: 1	T0049: 1	H0638:	L0454:	S0360:	H0393:	H0486:	L0163:	H0266: 1	H0328:	T0006:	H0674:	H0038:	H0616:	H0625: 1	L0598: 1	L0646:	L0662:	L0515:	L0783: 1	L0791: 1	H0520:	H0658:	S0013:	H0555:	L0780: 1	S0462:
																•									,				
_							_			_	_												···-						
				-																				÷	1				
							•																						
_				· · · ·					, -							,	•		<u>-</u>										
											•	Çt.	•																_
				100																								•	
										,												 u=							
		-					-		-			<u>-</u>	- 100	_				•				 •							

_									_		_														-						
																									•						
											*								,												*
					!																										
																									1					٠.	
		,		¥		AR089: 5, AR061: 5		H0620 2 H0448 2	TOO 5 4: 4 GOO 50: 1	H0254: 1, S0358: 1,	H0208: 1, H0592: 1 and	H0272: 1.			AR061: 8, AR089: 5	-	L0758: 4, H0624: 3,	H0038: 3, S0007: 2,	H0616: 2, L0770: 2,	L0803: 2, H0144: 2,	L0751: 2, L0747: 2,	L0750: 2, H0170: 1,		S0045: 1, H0553: 1,	H0040: 1, T0042: 1,	<u> </u>	L0655: 1, L0787: 1,		L0665: 1, H0520: 1,	S0126: 1, H0435: 1,	S0378: 1, L0720: 1,
Val-41 to Asn-46	1 to 1 to 1 to 1 to 1	Met-64 to Arg-70,	Arg-135 to Lys-146,	Tyr-151 to Asn-157,	Glu-167 to Ser-172.			Pro-156 to Arg-169			,		Leu-13 to Tyr-18,	Tyr-108 to Gly-113.					<u></u>				•	•			*				
1657						1103							1658		1104		•											•			
68 - 1630	-		12			816-310	15,	•					327 - 749		25 - 1494		*	<i></i>						•				·			
757						203							758		204																
875790						1150837							953599		1106208																
					-	HSGSC29					•				HTEDX38									-5						,	
						193									194																

													_				_			-	-			<u> </u>			_
						-		-														-					
•																											
H0555: 1, L0779: 1, L0777: 1 and S0192: 1.							•							AR061: 4, AR089: 1	L0758: 7, L0794: 4,	H0038: 2 and L0791: 1.		AR089: 1, AR061: 0	L0766: 7, H0561: 2,	L0774: 2, L0777: 2,	H0052: 1, H0264: 1,	H0625: 1, L0761: 1,	L0806: 1, L0776: 1,	L0790: 1, L0793: 1,	L0779: 1 and L0752: 1.		
	Gln-124 to Arg-135,	Ser-149 to Ser-154,	Lys-161 to Ser-176,	Ala-184 to Val-204,	Pro-207 to His-216,	Tyr-270 to Gln-281,	Ser-300 to Tyr-327,	Gly-330 to Asp-346,	Gln-352 to Glu-367,	Gly-380 to Ser-397,	Gln-401 to Trp-409,	Phe-420 to Tyr-435,	Ala-453 to Ser-458.	Arg-38 to Thr-48,	Asp-107 to Thr-114,	Ser-123 to Asp-135.		Ala-1 to Ala-8,	Ala-11 to Ser-22,	Gln-86 to Ala-92,	Asp-156 to Leu-167,	Arg-169 to Arg-176,	Glu-325 to Ala-332,	Asp-354 to Leu-360,	Ser-387 to Lys-395.	Arg-1 to His-8,	Asp-97 to Leu-108,
	1659									•				1105			1660	1106			н.					1991	
	3 - 1436	0.		•			,							1 - 405			2-319	2 - 1186								. 3 - 1022	
	759							,				·		205			09/	206								761	
	920697											-		1102531			908360	1150877								955814	
~														HTEJE15				HTOES03					÷				
														195				196									

_																												•		
_						_			-														_		,					_
						•											•													
-			:		1						-	<u></u>											2			·				
				•	AR061: 3, AR089:	L0777: 7, H0486: 3,	,0659: 3, H0436: 2,	.0731: 2, L0758: 2,	H0171: 1, S0134: 1,	H0657: 1, H0662: 1,	.0717: 1. H0592: 1.	` _;	· 🚅	H0633: 1, L0763: 1,	۲,	`_`	.0662: 1, L0805: 1,	,0776: 1, L0655: 1,	.0783: 1, H0659: 1,	.0612: 1, L0749: 1,	.0750: 1 and H0352:			H0423: 6, H0556: 4,	H0486: 4, H0271: 4,	S0134: 3, H0657: 3,	H0125: 3, S0278: 3,	H0581: 3, L0768: 3,	S0330: 3, H0134: 3,	H0436: 3, H0445: 3,
Ī			•		₹.	<u> </u>	ㅂ	브	<u>н</u>	Ħ	ם a	Ħ	Ħ	Ħ	김	김	<u>김</u>	크	<u>김</u>	<u>김</u>	ដ		¥	<u>—</u>	Ħ	<u>S</u> 0	田	Ħ	<u>S</u> 0	쁴
	Arg-110 to Arg-117,	Glu-266 to Ala-273,	Asp-295 to Leu-301,	Ser-328 to Ala-340.	Cys-10 to Gln-16,	Gly-66 to Arg-72,	Asp-170 to Trp-178,	His-207 to Arg-212,	Thr-265 to Lys-270,	Lys-274 to Lys-285,	Lys-306 to Gly-314.	Phe-331 to Val-356.									•	Cys-5 to Gh-11.	Ala-21 to Gln-27.							
					1107		·.															1662	1108							
	,			,	3 - 1070			*								,		à .				2 - 592	3 - 404						,	
					.207		•		•												*	762	208							
				-	1193057									•								908347	943936							
_					HTOHS18									,							:		HWAAX38				,			
_					197	-								7.									198							

			, , , , , , , , , , , , , , , , , , ,		i)
		- <u></u>			
				·	t .
H0542: 3, H0422: 3, H0265: 2, S0114: 2, S0218: 2, H0656: 2, S0360: 2, H0250: 2, H0069: 2, H0090: 2, H0264: 2, S0142: 2, L0766: 2, L0775: 2,	L0740: 2, L0777: 2, H0543: 2, T0002: 1, H0221: 1, H0220: 1, H0140: 1, H0255: 1,			L0806: 1, L0776: 1, L0655: 1, L0607: 1, L0661: 1, L0659: 1, L0809: 1, L0787: 1, L0664: 1, S0052: 1,	S0053: 1, H0698: 1, H0701: 1, H0539: 1, S0378: 1, L0748: 1, L0750: 1, L0756: 1,
<u> </u>	<u>4 }=4, }±4, }±4, }</u>	<u> </u>			<u> </u>
,	-				
•			-	· · · · · · · · · · · · · · · · · · ·	
			-		
				· .	·
·	,			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
,			•		

	\neg																								<u> </u>				
																										•			
																		•				•			•				
			-																				_	_					
										. ".																			
						-											_												
and		3	ر و		•	~\$	•	•	٠,	٠,	•	,			<u>_</u> ,	<u>_</u> ,			•	<u>,</u>			•	•		•	<u>_</u> ,	•	and
755: 1		4, AR089:	731:	L0766: 4,	L0751: 3	H0624: 2	L0770: 2	L0774: 2	H0670: 2	L0754: 2	L0777:2	L0757: 2	H0650:	H0675:	H0574:	H0052:	H0083:	S0003: 1	H0644: 1	H0038:	L0772: 1	L0768: 1	L0806: 1	L0776: 1	L0656: 1	H0689: 1	H0555:	L0756: 1	L0755: 1
L0779: 1, L0755: 1 and	1.	4, 4	L0759: 7, L0731: 6,	4, LO	3, LO	ຕົ	ລົ	رث م	2, H0	ď	2	ญ์	1, HO	1, HO	1, H0	1, HO	ı,	٠,	Ţ,	1, H0	1, 10,	1, LO	1, Lõ	1, LO	1, L0		F		1, LO
779:	H0136:	AR061:	0759	,0769: 4,	.0742: 3,	L0752:	S6026:	0803:	.0666:	H0521:	.0270.	.0753:	H0171:	H0341:	H0580:	H0013:	H0051:	S6028:	.0483:	H0628:	S0002:	.0764:	L0794:	.0805:	.0807:	L0789:	H0672:	S0027:	.0779:
<u> </u>	Ħ	Ψ	<u> </u>	<u> </u>	=	រ		2	급	耳	ដ	<u>ន</u>	田	闰	Ħ	田田	邑	S6	្ន	Ħ	S0	<u> </u>	<u>ន</u>	ន	ដ	<u>ន</u>	臣	<u>80</u>	ន្ន
		33,	55,	Asp-125 to Lys-136,	Val-174 to Pro-185,	-235,	Glu-270 to Gly-275,	-307.																		•			,
		Arg-	Thr-	to Ly	to Pro	to Ala	to Gly	to Lys	,																				
		Gly-25 to Arg-33,	Glu-40 to Thr-55	-125	-174	Pro-228 to Ala-235,	-270	Pro-299 to Lys-307.									•	•											
		Giy	<u>ල</u>	Ast	Val	Pro	ਲੁ	Pro													,			_			_		
	•	1109								•																		•	
-														-		<u> </u>													
		- 921																				•							
		1-																			× _								
		209																											
_	.						·																			_	-		
		21079							•	•															-				
_		HIMSFN70 1210794		_						·																			
		SFN/																											
		HM																											
	-	199		-																						-		÷	
		<u> </u>																											

															••								-	
				, X												.9								
					<u>. </u>										-									
		0.		<i>2</i>																				-
L0758: 1.		AR089: 98, AR061: 8 S0126: 2, H0341: 1,	H0412: 1, L0387: 1,	L0559: 1, 20374: 1 and S0434: 1			•		AR061: 4, AR089: 2	S0426: 3, L0766: 3,	S0126: 2, S0282: 1,	S0354: 1, S0376: 1,	S0045: 1, H0486: 1,	H0178: 1, S0003: 1,	H0622: 1, H0591: 1,	H0040: 1, H0551: 1,	H0647: 1, L0761: 1,	L0651: 1, S0152: 1,	H0521: 1, H0522: 1,	S0028: 1, L0754: 1,	L0757: 1, L0592: 1 and	H0542: 1.		AR061: 5, AR089: 2 S0354: 1, S0045: 1,
					Arg-1 to Gly-8,	Pro-18 to Gly-25,	Thr-60 to Leu-67,	Gly-10/ to 1hr-113.	Ser-10 to Ser-16,	Lys-226 to Trp-231,	Thr-288 to Ser-300.					•						-	Ser-10 to Ser-16, Phe-89 to Ser-97.	
	1663	1110	•		1664				1111				-									٠	1665	1112
	1 - 921	363 - 983			2 - 520				2 - 943		7									,			2 - 307	2 - 1357
	763	210	• .		764				211			-	•									٠	765	212
	921879	1224029	·.		923014				1164004											<u></u>			578441	1191756
		HUSGB93							HELHL56 1164004							•			-0		,			HOENY85
		200		. •					707															202

						_		_										-			—
									-												
											,				9				_		-
	-																				
*	•	- 1																			
H0178: 1, H0622: 1, H0591: 1, H0040: 1, H0647: 1, L0766: 1, S0126: 1, S0152: 1, H0521: 1, S0028: 1, L0754: 1, L0592: 1 and H0542: 1.): 5, AR061: 5 8: 4		AR089: 153, AR061:		H0648: 138, L0666:	63, L0595: 48, L0662:	663: 47, S0360:	15, H0670: 44, H0659:	3, L0659: 41, L0526:	39, S0358: 37, L0664:	35, L0717: 31, L0775:	1, H0657: 30, L0750:	30, T0010: 29, L0655:	665: 27, H0543:	27, L0598: 23, H0672:	S0330: 23, H0170:	351: 21, L0520:	646: 19, L0521:	19, L0752: 19, S0380:	L0596: 18, L0361:
H0178: 1 H0591: 1 H0647: 1 S0126: 1 H0521: 1 L0754: 1 H0542: 1		AR089: 5 H0038: 4		4R089	40	H064	33, LO	, 12 12, 12	15, HO	13, LO	39, SO	35, LO	31, HO	30, TO	29, LO	27, LO	23, SO	21,10	21, 10	19, LO	18, LO
<u> </u>	Lys-133 to Trp-138, Thr-195 to Gln-206.	Asp-57 to Lys-62.		, ,	Ser-78 to Gly-85.	:													<u> </u>		
_	1666	1113	1667	1114													•				
	2 - 664	209 - 541	216 - 458	1 - 588		<u> </u>															
	992	213	797	214									•								
	875830	1102680	526687	1228235																1	
		HTEHI14		HETDT70		-	-														
		203		204					,												

																* ***		<u>. </u>				•		+				
									٠.															•			-	
	. — i		14		<u> </u>													<u> </u>	-					<u></u>		· .	-	Ť
															_										•			
17,		H0519: 15, L0483:	4,	L0375: 13, H0436: 1 0588: 13, S0418:	12,	_		10, H0529: 10, H0547:	10, H0506: 10, H0686:), H0402: 9, H0486: 9,	H0560: 9, S0002: 9,	.0769: 9, L0638: 9,	S0328: 9, S0378: 9,	.0756: 9, L0605: 9,	S0412: 9, S0212: 8,	H0411: 8, H0581: 8,	H0052: 8, H0553: 8,	.0763: 8, L0497: 8,	,0565: 8, L0602: 8,	H0445: 8, H0352: 8,	H0624: 7, H0497: 7,	.0471: 7, H0087: 7,	HO551: 7, H0412: 7,	S0422: 7, L0651: 7,	7, L0517: 7,	H0520: 7, S0192: 7,	S0276: 7, H0685: 6,	S0420. 6 H0013. 6
18, HU 17, L03	16, L06			14, L03		12, H04	11, L05	10, HOS	10, H05	9, H040	H0560:	L0769:	S0328:	L0756:	S0412:	H0411:	H0052:	L0763:	L0565:	H0445:	H0624:	L0471:	H0551:	S0422:	L0653: 7,	H0520:	S0276:	G0420.
	•																											
																						•			•			
	•								٠.			•			•													
														-							ě		•					
				-			·	•			•			•			_		•						<u> </u>	•		
		•		_				-																				
•				1					•								·				•		-					
							- " .			<u></u> :			•					 -				·					4	

	•	-							_								-					-		_						
-	•							-						_		 ,				-	• .						_			
H0050: 6, H0355: 6,	H0188: 6, H0059: 6,		H0435: 6,	H0576: 6, L0589: 6,	.0581: 6, L0599: 6,	S0116: 5, S0356: 5,	S0045: 5,	H0351: 5, H0597: 5,	H0014: 5, S0388: 5,	S0250: 5, H0625: 5,	S0426: 5, L0637: 5,	L0518: 5,	.0782: 5, H0682: 5,	H0539: 5,	.0759: 5, H0423: 5,	H0125: 4, H0125: 4,	S0354: 4, H0580: 4,	S0046: 4, S0414: 4,	F0060: 4, H0421: 4,	H0046: 4,	H0009: 4, H0012: 4,	H0057: 4, H0688: 4,	F0006: 4, H0674: 4,	H0163: 4, H0591: 4,	H0509: 4, L0648: 4,	.0767: 4, L0768: 4,	0650: 4, L0527: 4,	.0530: 4, H0518: 4,	.0592: 4, L0608: 4,	.0603: 4, S0026: 4,
H0050: 6,	H0188: 6,	L0641: 6,	L0783: 6,	H0576: 6,	L0581: 6,	S0116: 5,	S0007: 5, S0045: 5,	H0351: 5,	H0014: 5,	S0250: 5,	S0426: 5,	L0766: 5,	L0782: 5,	H0658: 5, H0539:	L0759: 5,	H0650: 4,	S0354: 4,	S0046: 4,	T0060: 4,	H0545: 4, H0046: 4	H0009: 4,	H0057: 4,	T0006: 4,	H0163: 4,	H0509: 4,	L0767: 4,	L0650: 4,	L0530: 4,	L0592: 4,	L0603: 4,
							: :-	į		•										:					:					
			_	,								•											•							
					· 																	•	:		*.					<u>:</u>
		-1						•						-					-	-									***	
	*														-		0	•											-	

_								<u>.</u>														-								_
																														-
																					1									_
			~~		~ ~	·*	~·	~ ~	·	.,	~ ~				· .	•	<u> </u>	~;		2,		, ک		-5	2,		٠,	2,	~; c	- 3
S0242: 4, H0542: 4	, S0040: 3,	3282: 3	3, H0663:	, H0306: 3	0393: 3	H0640: 3, H0586: 3,	H0587: 3, H0150: 3,	H0123: 3, H0024: 3,	S0316: 3, H0617: 3,	H0032: 3, H0068: 3	H0135: 3, H0561: 3,	.0625: 3, L0501: 3,	L0606: 3, L0519: 3,	0990	0187:	S0392: 3, L0754: 3,	.0731: 3, H0667: 3	H0171: 2, H0394: 2,	S0342: 2, S0134: 2,	H0583: 2, H0656: 2,	.0416: 2, L0760: 2,	H0669: 2, H0661: 2,	S0444: 2, H0637: 2,	0619: 2	H0441: 2, H0333: 2,	T0039: 2,	H0546: 2,	N0006: 2, H0565: 2,	T0003: 2,	AUULD: 4, AUC) 75: 4,
2: 4. H	5: 3, S(H0341: 3, S0282:	5:3, H		H0208:3, H0393:	0:3, H	7:3, H	3: 3, H	6: 3, H	2: 3, H	5: 3, H	5: 3, L(6: 3, L(8: 3, H	4: 3, H	2: 3, L(1:3, H	1:2, H	2: 2, S(3:2, H	6: 2, L(9: 2, 迁	4: 2, H	S0468: 2, H0619:	1:2,H	H0485: 2, T	ત્રં	6: 2, H	HQ242: 2, T	0. 4, 11
S024	H0395: 3,	H034	H0255: 3	H0662: 3	H020	H064	H058	H012	S031	H003	H013	L062	1000 1000	L043	H013	S039.	L073	H017	S034,	H058	L041	990H	S044	S046	H044	H048	H0318:	000 <u>N</u>	H024	17071
						,		,																			٠.			
		•													•															
														·	*															
-			- 21		,					-												•						<u>. </u>		
							_	_											_					•						
																			•											
_					-	_														<u></u>				1					 ,	
				_	-		·									,						-1								_
_	 .			<u></u>												···-		,					. 	<u></u>						
_	·		<u>.</u>																						<u>.</u>					
																				•										

		·	· _																											
																							•							
							•																							
	1																				_			_						
																		٠												
				<u></u>						,	_			<u> </u>																
ર્લ	2,	7,	Ų,	ć,	., 2,	رغ ج	٠,٠	2,	ري ر	ų	ري (ີດໂ	์ ๙์	່~ຳ	2,	7,	ζ,	ર્વ	~; ~;	1,	1,	1,				T,	1,	1,	1,	_;
H0629: 2, H0061: 2,	H0028: 2, H0615: 2,	2, H0031: 2,	169:	2, H0056: 2,	T0069:	H0022: 2, H0494: 2,	210:2	L0371: 2,	761:2	: 2, L0379: 2	L0807:2	L0543: 2	368: 2	S0126: 2, H0651: 2,	044: 2	L0740: 2	L0758: 2	194:2	L0600: 2	H0186:	T0002:	L0406:	L0420:]	L0778: 1	001:1	348:	H0676:	339:	639:	369:
2, H0	2, H0	2, H0	2, H0169:	2, H0	2, T0	2, H0	2, S02	2, 1.0	່~ິເ	2, LO	2, LO	, 10.	L0368: 2, T0068:	2, HO	H0521: 2, S0044:	2, LO	2, LO	2, S0194:	, LO	1, H0	1, TO	1,10	1,10	-	.0785: 1, S0001:	H0638: 1, S0348:	1, HO	S0408: 1, H0339:	S0132: 1, H0639	S6026: 1, H0369:
629:	028:		H0606: 1	H0616:	H0623:	022:	S0440: 2	,0762: 2,	535: 2	L0773: 2	.0661:2,	L0542: 2,	368: 2	126:2	521:	S0032: 2,	L0755: 2,	S0260: 2	S0424: 2,	L0441: 1	H0556: 1,	H0294: 1,	.0419:	L0427:	785:	638:	S0442: 1,	408:]	132:_1)26:]
H H	H H	H H	H H	E E	E C	田	% S	Ë	Ö	ì	ទ្ឋ	S	0	80	出	<u>S</u> 0	ñ	S0.	Š S	Ì	요	出	Š	Š	È	出	<u>20</u>	<u>20</u>	20	S6(
																									•					
					·.																				,				:	
														•																
							-	_			,								,											
	-																	·												_
														*														<u>.</u>		
				•																										
				•																_										
											•																			
					_						<u>·</u>							_		•										
		 :																				-				•				-
														•																

										 						 	 							<u></u> -		<u> </u>
						-												:								
	•	,				•	٠											-				•	,			
S0222: 1, H0431: 1.	` — `	H0610: 1, H0415: 1,	H0537: 1, H0438: 1,	H0612: 1, H0600: 1,	ı,	H0643: 1, H0574: 1,	H0632: 1, H0559: 1,	L0623: 1, T0040: 1,	L0586: 1, T0109: 1,	H0427: 1, H0599: 1,	H0098: 1, H0575: 1,	T0082: 1, H0590: 1,	S0010: 1, T0048: 1,	T0071: 1, H0196: 1,	H0251: 1, L0033: 1,	H0596: 1, H0231: 1,	H0620: 1, H0154: 1,			S0334: 1, H0687: 1,	H0288: 1, H0286: 1,	S0312: 1, S0003: 1,	H0252: 1, H0328: 1,	H0030: 1, L0143: 1,	H0111: 1, H0166: 1,	H0673: 1, S0364: 1,
																-							-			
							•																			
												,	¥										•			
	٥							-				jet.														
		,							-							 	 						<u></u>	_		
	•							1											•					نوء		

			-								_							-	-										-
										-		:																	
																•	•												
														*	-										-				
												.:						•					-					_	
140:1	268: 1	79: 1	H0100: 1,	42: 1,	15: 1,	82: 1,	65: 1,	50: 1,	541: 1	546: 1	42: 1,	08: 1,	40: 1	67:1,	72:1,	72: 1,	94: 1,	99: 1,	04: 1,	76: 1,	29: 1,	13:1,	82: 1,	45: 1,	L0647: 1,	.0532: 1,	H0689: 1,	83: 1	55: 1,
H0038: 1. H0040:	H0272: 1, H0268:	1, H0079:	, H01	, T0042:	1, \$0015	1, S0382:	1, L0065:	S0438: 1, S0150:	l, H0641:	l, H0646:	, S01.	S0344: 1, S0208: 1	H0026: 1, L0640:	, L0667:	, L0772:		, L0794:	, L0499:	, L0804:	, L0376:	, L0629:	, L0513:	, L0382:	, L0545:	, L06		, H06	H0690: 1, H0683:	H0684: 1, L0355: 3
038:	272:	T0004: 1	,0062: 1, I	F0041: 1	H0512:	H0396: 1	S0294: 1	138: 1	H0130: 1	H0633: 1,	144: 1	344: 1	026:]	L0770: 1	.0627: 1,	0373: 1	L0626: 1	.0381: 1	L0803: 1	20774: 1	.0607: 1	L0510: 1	.0635: 1	.0809: 1	.0529: 1	.0789: 1,	.0352: 1,	690: 1	684:]
	H	<u>ũ</u>	ğ	<u>ũ</u>	H	H H	<u>80</u>	<u>Š</u>	H H	H H	20	SO	H H	<u>2</u>	ភ្ន	2	Š	2	Ŝ	É	ទ្ឋ	<u> </u>	ន្ន	Ŝ	Š	Š	9	邑	H 5
											•							٠											
												-																	
-															<u> </u>														
			•																						•				
									<u> </u>								•												
																							<u>. </u>		_				<u> </u>
				•																									
												<u>-</u>						_					0						
-													_	_											-				

S0190: 1, S0176: 1, S0146: 1, S0404: 1, H0555: 1, H0478: 1, H0479: 1, H0631: 1, S0037: 1, S0028: 1, L0741: 1, L0742: 1, L0744: 1, L0742: 1, L0745: 1, L0746: 1, L0757: 1, S0031: 1, H0343: 1, S0434: 1, L0597: 1, L0594: 1, L0601: 1, S0011: 1 and: 1.	*	AR061: 7, AR089: 3 L0752: 3, L0748: 2, L0740: 2, L0731: 2, S0358: 1, H0438: 1, H0574: 1, H0046: 1, H0041: 1, H0272: 1, S0150: 1, L0794: 1, L0803: 1, L0804: 1, L0775: 1, L0661: 1, L0779: 1, H0672: 1, H0539: 13 H0672: 1, H0539: 13, L0748: 7, H0591: 4, L0770: 4,
×	Gly-33 to Asp-45, Ser-78 to Gly-85.	Arg-98 to Thr-104, Gin-117 to Lys-122, Tyr-250 to Leu-262, Leu-294 to Phe-304,
	1668	1115
	1 - 597	248 - 574
	768	215
	937999	936262
		HPIAT34
	-	205

																•												_	<u> </u>
											•									,					•		,		
										-				-		,	-,.						•						
-0				· ··										•		-	********											•	
H0622: 3, H0560: 3,	L0794: 3, L0518: 3,	L0752: 3, L0588: 3,	S0376: 2, H0013: 2,	H0581: 2, H0231: 2,	L0163: 2, H0090: 2,	H0623: 2, S0142: 2,	L0772: 2, L0766: 2,	L0665:	H0144: 2, L0565: 2,	L0352: 2, H0689: 2,	H0542: 2, T0002: 1,	H0657: 1, S0116: 1,		H0638: 1, S0007: 1,	H0619: 1, H0411: 1,	S0278: 1, H0497: 1,	H0486: 1, H0635: 1,	H0156: 1, H0046: 1,	H0051: 1, S6028: 1,	S0003: 1, H0551: 1,		H0646: 1, S0002: 1,	H0529: 1, L0640: 1,	L0639: 1, L0768: 1,	L0804: 1, L0651: 1,	L0659: 1, L0809: 1,	L0788: 1, L0663: 1,	H0701: 1, H0703: 1,	S0374: 1, H0547: 1,
Gly-359 to Lys-367,	Arg-382 to Phe-393,	Pro-572 to Ser-592.		•				-													*	-							•
		•	•	•			-							•															
								,				,			·													-	
				•		_					 										-							,	
	-																					•			-				
					•				•				_																<u>.</u>
	,		-		·									-		•					<u></u>					_		·	

						0		•.							<u>.</u>		-					-	<u> </u>
														-									
					-	-										•						•	
												,										_	
H0522: 1, H0555: 1, H0478: 1, L0744: 1, L0750: 1, L0731: 1, H0423: 1 and S0424: 1.		AR089: 4, AR061: 3 1.0439:13 1.0748:7	H0591: 4, L0770: 4,	L0779: 4, L0777: 4,	H0622: 3, H0560: 3,	L0794: 3, L0518: 3,	L0752: 3, L0588: 3,	S0376: 2, H0013: 2,	H0581: 2, H0231: 2,	L0163: 2, H0090: 2,	H0623: 2, S0142: 2,	L0772: 2, L0766: 2,	L0655: 2, L0665: 2,	H0144: 2, L0565: 2,	L0352: 2, H0689: 2,	L0758: 2, L0759: 2,	H0542: 2, T0002: 1,	H0657: 1, S0116: 1,	H0341: 1, S0212: 1,	H0638: 1, S0007: 1,	H0619: 1, H0411: 1,	S0278: 1, H0497: 1,	H0486: 1, H0635: 1, H0156: 1, H0046: 1.
	Arg-98 to Thr-104, Gln-117 to Lys-122.	Arg-59 to Thr-65, Gin-78 to I vs-83	Tyr-211 to Leu-223,	Leu-255 to Phe-265,	Gly-320 to Lys-328,	Arg-343 to Phe-354,	Pro-533 to Ser-553.											•					
	1669	1117				-										-	•						
,	102 - 620	2 - 1720								•	•					,			141		٠		
	692	217																				· .	
	963126	1204709																					
		HIMSHI83							٠														
		207						-	8				•									1	

H0051: 1, S6028: 1, S6003: 1, H0551: 1, L0640: 1, L0640: 1, L0651: 1, L0631:		. ∔	
963083 770 2 - 841 1670 Arg-59 to Thr-65, Gla-78 to Lys-83, Tyr-211 to Leu-223, Glu-257 to Lys-262. 952389 218 3 - 1229 1118 Arg-1 to Leu-59, Leu-91 to Phe-101, Gly-156 to Lys-164, Arg-179 to Phe-190, Pro-369 to Ser-389.		.	
963083 770 2 - 841 1670 Arg-59 to Thr-65, Gla-78 to Lys-83, Tyr-211 to Leu-223, Glu-257 to Lys-262. 952389 218 3 - 1229 1118 Arg-1 to Leu-59, Leu-91 to Phe-101, Gly-156 to Lys-164, Arg-179 to Phe-190, Pro-369 to Ser-389.		, .	
963083 770 2-841 1670 952389 218 3-1229 1118	H0051: 1, S6028: 1, S0003: 1, H0551: 1, H0509: 1, H0641: 1, H0646: 1, S0002: 1, L0639: 1, L0640: 1, L0804: 1, L0658: 1, L0804: 1, L0651: 1, L0788: 1, L0653: 1, H0701: 1, H0703: 1, S0374: 1, H0547: 1, H0522: 1, H0555: 1, H0478: 1, L0744: 1, L0750: 1, L0731: 1,	H0423: 1 and S0424:	AR089: 9, AR061: 7 H0486: 102, S0360: 76, L0598: 39, H0251: 35, L0659: 32, H0144: 32, H0013: 31, H0624: 28, H0024: 26, H0050: 25, L0471: 25, L0662: 22, L0748: 22, H0619: 20, H0123: 20, S0003: 18, H0031: 15, H0170: 14, H0124: 14, H0328:
963083 770 2-841		Arg-59 to Thr-65, Gln-78 to Lys-83, Tyr-211 to Leu-223,	Glu-257 to Lys-262. Arg-1 to Cys-9, Tyr-47 to Leu-59, Leu-91 to Phe-101, Gly-156 to Lys-164, Arg-179 to Phe-190, Pro-369 to Ser-389.
963083 770		1670	1118
963083		2 - 841	3 - 1229
		770	218
S		963083	952389
HTEPM4			HTEPM45
708			208

						•									-				_			,								-
	-								•				•																	
													•												٠					
		- 1									_		t la										- ÷	23	·			-		_
								•																						
. .	ċ		4	9:0													:					-	_	4,						
H0644:	2 S0126-12 S0028-	11, L0757: 11, S0196:	10, S0214:	L0589: 10, S0040: 9,	H0622: 9, L0731: 9,	56:8,	86: 8,	52: 8	52:8	81:7	55: 7,	98: 6,	71:6,	43: 6,	12: 5,	08: 5	16:5	66: 5,	58: 5,	27:5,	32: 5,	76: 4,	39:4	90:4	54: 4,	30: 4,	12: 4,	45:3	46:3	50: 3,
13,	4.15	7: 11, 7: 11,	7: 10,	9: 10,	, LO7	H0171: 8, S0356: 8	, H05	H0620: 8, H0252:	H0551: 8, H0352:	H0661: 7, H0081:	L0747: 7, L0755:	S0358: 6, H0598:	L0646: 6, L0771: 6,	, H03	H0595: 6, S0212:	, H0208:	H0574: 5, H0316:	, L06	L0565: 5, H0658:	S0390: 5, S0027: 3	S0011: 5, S0192: 5	S0194: 5, S0376: 4	H0575: 4, H0039: 4	H0628: 4, H0090: 4	L0663: 4, L0664: 4,	S0374: 4, S0380: 4,	L0744: 4, S0242: 4	, H0645:	H0411: 3, H0546:	, S0250:
L0750:	2012	L075	1, H0587:	L058	522: 9	171:8	17:8	520:8	551:8	561:7	47:7	58: 6	46: 6	14: 6	595: 6	H0329: 5,	574: 5	100:5	65:5	90:5	11:5	94: 5	575: 4	528: 4	63: 4	74: 4	44:4	H0295: 3,	111:3	40012:3
713, 1	,	11,	11,	10,1	HOC	H01	L07	HOM	HO	HO	107	S03	106	S30	HO	H03	H0;	<u>H</u>	105	S03	<u>800</u>	S01	HO	HO	100	S03	107	H02		I I
											. '							•								:				
		••		•							•												٠							
				٠,																										
										٠.			<u>:</u>																	
											٠																			
	_		•			<u> </u>	<u> </u>						-											•						
						•																. 8								
	_																													
_				_									-						<u>. </u>								_			
-		•																												
													•								•									•

			,													•						•								_
			•	r									<u></u>	_							 -				•					_
					<u> </u>							-2								<u>. </u>	,					-				
.0768: 3. L0375: 3.	H0684: 3, H0672: 3,	S0332: 3, L0754: 3,	H0294: 2, H0663: 2,	H0592: 2, S0005: 2,	H0333: 2, H0632: 2,	H0485: 2, T0060: 2,	H0599: 2, H0309: 2,	H0544: 2, H0545: 2,	H0041: 2, H0375: 2,	H0553: 2, L0142: 2,	H0647: 2, L0776: 2,	L0665: 2, H0648: 2,	S0330: 2, S0378: 2,	S0206: 2, S0032: 2,	J0751: 2, H0668: 2,	S0384: 2, H0506: 2,	15: 1, S0342: 1,	H0381: 1, S0116: 1,	S0001: 1, H0664: 1,	125; 1, S0354: 1,	F0008: 1, H0640: 1,	H0370: 1, H0391: 1,	F0039: 1, H0101: 1,	H0245: 1, H0156: 1,	.0021: 1, H0122: 1,	H0318: 1, H0231: 1,	Ţ	H0051: 1, H0286: 1,	H0364: 1, H0428: 1,	10023: 1, 10143: 1,
707	HOH	S03	HO2	HO	HO	70H	H0.	<u>说</u>	HO	HO	HO	100	S03	S02	<u>5</u>	S03	<u>1</u> 2	HO	200	H OH	100 100 100	HO	<u>1</u> 00	HO	<u> </u>) H	HOC)OH	HO	717
					÷																									
_			<u>-</u>						.																					1
												÷		-									. —							
					:	•																•								
																							•			٠.				
						-												_			-	•		.,			•		*	_
			_			_																								_
				٠																										

L0522: 1, L0775: 1, L0806: 1, L0607: 1, L0512: 1, L0634: 1, L0526: 1, L0783: 1, L0367: 1, H0547: 1, H0682: 1, H0659: 1, H0660: 1, H0666: 1, S0118: 1, S0037: 1, H0445: 1, L0590: 1, L0603: 1, H0665: 1,	AR089: 1, AR061: 1 L0758: 19, L0777: 16, L0747: 13, L0750: 13, L0748: 10, H0692: 9, L0775: 6, L0749: 6, L0766: 5, L0774: 5, L0740: 5, L0764: 4, L0662: 4, S0126: 4,
	Glu-6 to Asp-12, Ser-55 to Leu-61, Glu-124 to Ser-133, Gly-152 to Pro-160, Glu-180 to Ile-186, Leu-194 to Asp-199, Thr-208 to Arg-223, Pro-257 to Gln-262,
	1119
	3 - 1703
	219
	953366
•	HE8OV13
	209

		· · · · · · · · · · · · · · · · · · ·	
	4		
	*		
and		2 1.	· ,
	w.	AR061: 5, AR089: H0251: 5, S0045: 2, S0354: 1, H0587: 1, H0375: 1 and L0565:	
H0551: 1, H0100: 1 H0647: 1, S0142: 1 S0344: 1, H0529: 1 L0763: 1, L0770: 1, L065: 1, L0761: 1, L067: 1, L0641: 1, L0374: 1, L0767: 1, L0647: 1, L0792: 1, L0663: 1, L0792: 1, H0520: 1, H0689: 1, H0555: 1, H0478: 1, S0378: 1, S0380: 1, L0439: 1, L0742: 1, L0731: 1, L0742: 1, L0731: 1, L0742: 1, H0555: 1, H0478: 1, H0555: 1, H0478: 1, H0555: 1, H0478: 1, H0555: 1, H0422: 1, H0543: 1, H0422: 1, H0543: 1, H0422: 1,		AR061: 5, AR089: H0251: 5, S0045: 2, S0354: 1, H0587: 1, H0375: 1 and L0565:	
H0551: 1, H0647: 1, S0344: 1, L0763: 1, L0667: 1, L0847: 1, L0663: 1, H0520: 1, H0555: 1, S0378: 1, H0555: 1, S0378: 1, H0555: 1, H0555: 1, H0555: 1, H0555: 1, H0555: 1, H0555: 1,		AR061: H0251: S0354: 1, H0375: 1	
H0551: H0647: S0344: L0763: L0667: L0374: L0647: L0663: H0520: H0682: S0378: H0555: S3012: L0439: L0439: L0439: L0439: H0553:		AR(HC S03 H03	<u> </u>
	14, 101.	_:	l, 83, 101, 1113.
	Pro-39 to Gln-44, Pro-94 to Asp-101	His-6 to Asn-11	His-6 to Asn-11, Asp-74 to Ala-83, Asp-95 to Leu-101, Leu-108 to Ser-113
	-39 to -94 to	-6 to A	-6 to 74 to -95 to -108 t
	Pro Pro Pro Pro	His	His- Asp Asp Leu
	1672	1120	1673
		•	
	2 - 1162	103 - 837	2 - 640
	7	10	7
	772	220	773
	14	, 28	02
	911341	1011928	923702
× · · · · · · · · · · · · · · · · · · ·			
		HBLGU27	
		210	

								<u>_;</u>																-					
			_	-		_																							
AR061: 3, AR089: 3	H0250: 4, L0766: 4,	H0543: 4, H0559: 3,	H0306: 2, H0635: 2,	H0641: 2, H0521: 2,	L0779: 2, H0542: 2,	H0423: 2, H0556: 1,	H0402: 1, L0468: 1,	H0190: 1, H0069: 1,	H0581: 1, H0087: 1,	T0041: 1, L0761: 1,	L0768: 1, S0053: 1,	H0672: 1 and H0422: 1.											•	٠	*			H0026: 1, L0560: 1,	L0378: 1 and H0595: 1.
Arg-8 to Lys-19,	Gln-75 to Pro-84,	Ser-112 to Ser-120,	Asn-132 to Glu-138,	Ala-159 to Lys-172,	Arg-217 to Gln-223,	Asp-254 to Ser-259,	Glu-297 to Gln-304,	Pro-385 to Lys-395,	Tyr-422 to Leu-427,	Gln-438 to Glu-446,	Arg-500 to Leu-510,	Leu-555 to Thr-562,	Pro-568 to Asp-573,	Ser-648 to Ser-653,	Ala-770 to Gly-777,	Trp-803 to Leu-808,	Leu-833 to Trp-843,	Ala-851 to Thr-856,	Lys-866 to Gly-873,	Leu-904 to Arg-911,	Arg-953 to Arg-961,	Cys-973 to Arg-978,	Pro-1003 to Arg-1016.	His-1 to Leu-7,	Leu-52 to Thr-59,	Pro-65 to Asp-70,	Ser-145 to Ser-150.	Ala-47 to Gly-55.	
1121																								1674				1122	
192 - 3269				-						-						,				•				1 - 687				28 - 339	
221	•								•															774				222	
1226157																					•			911447				685902	
HHEDC90 1226157																				•								HNBRB59	
211												-																212	_

			_										 					-									
														•			-										
						3	,														•					Ĭ.	
		AR089: 1, AR061: 1	H0521: 4, H0650: 3,	H0677: 3, H0656: 2,	H0069: 2, H0581: 2,	H0542: 2, H0423: 2,	H0255: 1, L0539: 1,	S0358: 1, H0575: 1,	_	٦,	S0002: 1, H0529: 1,	H0697: 1, H0543: 1 and	AR089: 3, AR061: 1	L0766: 6, H0521: 6,	H0250: 5, H0543: 5,	H0559: 4, H0581: 4,	L0761: 4, L0779: 4,	H0542: 4, H0650: 3,	H0306: 3, H0069: 3,	H0023: 3, H0423: 3,	H0422: 3, H0677: 3,	H0656: 2, H0255: 2,	H0257: 2, H0635: 2,	H0560: 2, H0641: 2,	L0789: 2, L0777: 2,	H0556: 1, H0402: 1,	L0539: 1, S0358: 1,
Asn-17 to Lys-25, Arg-40 to Glu-46.	Lys-64 to His-75.	Arg-12 to Val-20,	Gln-43 to Glu-51.								-		Arg-8 to Lys-19,	Gln-75 to Pro-84,	Ser-112 to Ser-120,	Asn-132 to Glu-138,	Ala-159 to Lys-172,	Arg-217 to Gln-223,	Asp-254 to Ser-259,	Glu-297 to Gln-304,	Pro-385 to Lys-395,	Tyr-422 to Leu-427,	Gln-438 to Glu-446,	Arg-500 to Leu-510,	Leu-555 to Thr-562,	Pro-568 to Asp-573,	Ser-648 to Ser-653,
1675		1123											1124														
1 - 237		38 - 352											135 - 2861					<u> </u>	-	. 4	,					,	
577.		223											224			•						٠			•		
738995		965414			,						•		1223496			_	-,										
		HNNBI16		,			•						HUJCL61											•			
		213											214														

					*			•		
L0468: 1, H0190: 1, H0575: 1, H0457: 1, H0083: 1, H0063: 1, H0087: 1, T0041: 1, S0002: 1, H0695: 1, H0529: 1, L0764: 1, L0768: 1, S0053: 1, H0697: 1, H0702: 1, H0658: 1, H0672: 1,	*	AR061: 2, AR089: 1 S0360: 1, S0132: 1 and H0412: 1.		AR061: 1, AR089: 0 L0770: 2, L0803: 2,	L0439: 2, L0740: 2, L0731: 2, S0001: 1,	H0373: 1, L0638: 1, L0766: 1, L0655: 1,	L0787: 1, L0788: 1, L0745: 1, L0755: 1 and	L0366: 1.		AR089: 6, AR061: 3 L0439: 6, L0804: 4,
Ala-770 to Gly-777, Trp-803 to Leu-808, Leu-833 to Trp-843, Ala-851 to Thr-856, Gln-863 to Trp-873, Cys-883 to Arg-901.	Arg-8 to Lys-19, Gln-75 to Pro-84, Ser-112 to Ser-120.		Glu-65 to Arg-72.	Ser-36 to Lys-42, Ala-70 to Gln-86.	·				Glu-28 to Phe-33, His-47 to Ser-53.	
	1676	1125	1677	1126	•				1678	1127
	116 - 715	33 - 1238	210 - 548	1				- 1	220 - 399	12 - 878
	776	225	777	226	٠.				778	227
	911432	1089187	911481	1228147	<u></u>				713795	958912
		HWLRC68		HFXFH42				1		HEQAN73
		215		216						217

· · · · · · · · · · · · · · · · · · ·			
L0794: 3, L0756: 3, L0779: 3, H0125: 2, H0599: 2, H0544: 2, H0046: 2, L0764: 2, L0766: 2, L0803: 2, L0738: 2, H0521: 2, L0731: 2, S0452: 2, S0045: 1, S0046: 1, H0549: 1, H0194: 1, H0549: 1, H0194: 1, H0545: 1, H0194: 1, L076: 1, L0768: 1, L076: 1, L0768: 1, L0775: 1, L0806: 1, L076: 1, L0666: 1, L0805: 1, L0666: 1, L0663: 1, H0520: 1, H0519: 1, H0445: 1, S0380: 1, H0445: 1,	AR061: 5, AR089: 3 S0044: 1 and S0028: 1.	AR061: 3, AR089: 1 S0045: 1	AR089: 13, AR061: 2 H0521: 6, L0757: 5, L0749: 4, L0779: 4,
	Met-1 to Glu-14, Thr-73 to Glu-81, Ala-86 to Ile-96. Glu-31 to Leu-36.		Asp-1 to Gly-9, Asp-86 to Glu-91, Pro-97 to Gly-103,
	1128	1129	1130
	575 - 252 3 - 215	575 - 33 129 - 788	1 - 558
	228	229	230
	1106294	1103702 925698	957586
- 44	HSLFS31	HELGKS6	HAMFW05
	218	219	220

										·			-								 							
				-	 																			-				
								٠			•																	
																٠						*						
H0620: 3, S0040: 2,	S0342: 2, H0305: 2,	S0418: 2, S0132: 2,	H0551: 2, H0412: 2,	S0344: 2, L0776: 2,	L0747: 2, L0752: 2,	H0542: 2, T0049: 1,	H0656: 1, S0001: 1,	H0306: 1, S0360: 1,	S0046: 1, H0619: 1,	H0370: 1, H0559: 1,	H0590: 1, H0266: 1,	H0288: 1, H0286: 1,	H0252: 1, H0213: 1,	H0673: 1, H0116: 1,	_	H0560: 1, H0652: 1,	S0002: 1, H0529: 1,		L0772: 1, L0646: 1,	L0764: 1, L0765: 1,	 _	L0789: 1, S0126: 1,	H0435: 1, H0539: 1,	S0152: 1, H0522: 1,	H0555: 1, S3014: 1,	L0777: 1, L0731: 1,	L0758: 1, S0031: 1,	S0011: 1 and S0446:
Lys-115 to Asn-121,	Pro-159 to Arg-166.	Pro-168 to His-173.	,					-																				
													,					•										
	• .																		•									
				-		-	-	-										-			 2							
					 			÷						-						•								•
																				•								-
		· ·																·			 ·		-					

													*	_												_		
									•																			
AR089: 2, AR061: 2	H0038: 3, L0758: 2, H0616: 1 and T0042: 1.		,	-		AR089: 2, AR061: 1	L0766: 9, L0742: 6,	S0358: 3, L0803: 3,	H0521: 3, L0777: 3,	,0758: 3, H0413: 2,	S0466: 2, L0775: 2,	0666; 2, L0779; 2,	.0752: 2, S0360: 1,	H0393: 1, H0587: 1,	H0486: 1, H0013: 1,	H0069: 1, H0575: 1,	H0052: 1, H0545: 1,	H0510: 1, S0003: 1,	H0553: 1, H0560: 1,	H0509: 1, S0422: 1,	.0598: 1, L0762: 1,	0794: 1, L0804: 1,	,0664: 1, H0519: 1,	H0522: 1, L0755: 1,	S0031: 1 and H0653: 1.	AR061: 2, AR089: 2	L0777: 8, L0779: 5,	.0646: 3, L0803: 3,
Leu-58 to Val-64, A	Lys-120 to Phe-132, Tyr-150 to Thr-157, H	Glu-178 to Glu-183,	Arg-217 to Leu-222,	Glu-236 to Ser-252.	Leu-58 to Val-64.	4		Lys-77 to Val-83. St		Ð	<u>x</u>	Ā	Ħ		H	<u>円</u>	<u> </u>	直	H		ĭ	<u>급</u>	<u>ii</u>	H	<u>S</u>	Glu-13 to Ser-19, A		Ser-89 to Gly-96, L(
1131					1681	1132					-									•						1133		
70 - 828					75 - 497	2-550	•				1															249 - 1298		
231					781	232																				233		
1193054					772995	943287										·										1193044		
HTEDG81 1193054						HAMG024													-	9						HMWBH91 1193044		_
221						222																				223		_

																						<u> </u>		-,-	<u>.</u>			
																				•							•	
		<u> </u>																			· .		,					
													ē														*	
ر ب ب	2,	2	2,	1,	1,	, <u>, , , , , , , , , , , , , , , , , , </u>	1,	1,	1,	1,	1,	1,	1,	1,	1,	1,	1,	1,	1,	1,	1,	22: 1.						
2, S0280: 2, L0766:	S0152:	L0740:	L0595:	T0002:	H0341:	S0132:	, H0486:	H0599:	S0003:	H0628:	H0633:	L0772:	L0665:	S0126:	H0666:	, H0521:	H0555:	L0748:	L0752:	L0759:	C0480:	and H0422					•	
C0448: 2, S C0794: 2, I	ď,	'n	ď	H0170: 1,	۲,	20005: 1, 5	.0717: 1, F	H0013: 1, 1	H0373: 1,	H0428: 1,]	F0067: 1, I	H0529: 1, 1	.0382: 1, I	H0519: 1, 9	H0435: 1, 1	-	Ļ	Ĺ	.0747: 1, I	.0731: 1, I		H0667: 1 a						
		_			S0134:	Loo	L07	HOO	H03	H04	T00	H05	103	HOS	H04	S0380:	S0013:	H04	L07	107	H04	904					·	
Ser-151 to Arg-156, Tyr-228 to Leu-242,	Pro-257 to Phe-262,	Asn-265 to Asn-270,	Gly-309 to Lys-315,	a-338,	rg-350.	1																	,-54,	-76,	·o-107,	ly-153,	.g-213,	eu-299,
31 to A 28 to L	57 to Pł	65 to A	39 to L	Ile-331 to Ala-338,	Glu-345 to Arg-350																		Pro-48 to Gly-54,	Ser-56 to Ser-76,	Lys-102 to Pro-107	Ser-146 to Gly-153,	Ser-208 to Arg-213,	Tyr-285 to Leu-299
Ser-15 Tyr-22	Pro-25	Asn-2	Gly-3	Ile-33	Glu-3		<u> </u>									×							Pro-48	Ser-56	Lys-1(Ser-14	Ser-20	Tyr-28
																							1682	٠.				
					<u></u> :			 -							•	<u> </u>	<u> </u>		_			-						
																							73 - 1293					
· · · · · ·						· ·					÷	<u> </u>		·				<u>·</u>					782				<u> </u>	
<u></u>											-	,											-		·			
																							882083					
										-						٠												
			_																									
																								_				

										-					-					_	<u> </u>	-							\neg
	•																							•					
				-						٠																			
			-3:			,		•							•										,				
																						-							
																			· _									<u> </u>	
					<u>:</u> .	∞•			•		•	•	~ :	•	<u>ئ</u> ــــــــــــــــــــــــــــــــــــ	•	•				•					. •	•	•	
					8, AR089:	L0759: 9, L0758: 8,	0439: 5, L0163: 4	.0779: 4,	L0750: 3	H0063: 2	L0766: 2	.0438: 2	H0666: 2	L0757: 2	H0656:	H0574: 1	H0687: 1	H0038:	L0475: 1	L0769: 1	L0764: 1	.0774: 1	L0776: 1	L0559: 1	L0665: 1	S0152: 1	751: 1	L0755: 1	S0434: 1
					& Y	9, L	5, LO1	4, LO	3, 1.07	3, HO	2, LO7	2, L0	_	2, 1.07			-:	<u>_</u>	Ę,	1, 1.07	1, 1.07	1, 1.07	1, 1.07	1, LO	l, L06	' ــــ'			1, 804
					AR061:	0759:	439: 4	0809: 4,	0770:	0777:	0794: 2	0659: 2	S0126:2	.0747: 2	H0542: 2,	.0785: 1	.0105: 1	T0644:	10616:	.0520: 1	,0646: 1	,0803: 1	.0775:]	.0655: 1	.0663:]	H0684:	H0555:	.0749:]	0731:
Γ			-	_	AR	<u> </u>	<u> </u>	និ	្ឋ	2	ij	ភ្ន	SO	<u>ප</u>	H	<u>2</u>	្ឋ	H	出	្ឋ	<u>n</u>	ទ្ធ	ì	ទ្ឋ	Š	H	H	2	ន
319,	Asn-322 to Asn-327,	.372,	195,	407.	•	-112.																					:		
Pro-314 to Phe-319,	o Asr	Gly-366 to Lys-372,	lle-388 to Ala-395,	Glu-402 to Arg-407	Ala-5 to Ser-11,	Ser-101 to Asn-112.													1.30									٠.	
314 tc	322 t	366 to	88 to	402 to	5 to S	[0] tc						•													•			•	
Pro-	Asn-	G S	ne-3	Glu-	Ala-	Ser-															_								
					1134					_					_		0								_				
	,																									è			
i					934																								
					140 -																								
-					-					•											•								
					234				٠																				
					965639								•		•								<u> </u>	¥					
					965											*							_		<u>-</u>				
					H19																			•					
	-				HOECH19	,																							
									_														_						
					224									٠					•									ž	

																						*			
S0242: 1, H0543: 1, H0422: 1 and S0412: 1.	AR061: 150, AR089: 93	S0011: 1		AR089: 3, AR061: 1	H0542: 40, H0543: 10,	H0580: 4, H0592: 4,	H0510: 4, H0593: 4,	H0521: 4, H0551: 3,	H0509: 3, H0519: 3,	H0650: 2, H0586: 2,	H0587: 2, H0544: 2,	H0546: 2, H0545: 2,	H0522: 2, H0555: 2,	H0583: 1, H0602: 1,	H0581: 1, H0488: 1,	H0689: 1, H0528: 1 and		AR061: 1, AR089: 1	H0542: 40, H0543: 10,	H0580: 4, H0592: 4,	H0510: 4, H0593: 4,	H0521: 4, H0551: 3,	H0509: 3, H0519: 3,	H0650: 2, H0586: 2,	H0587: 2, H0544: 2,
	Ile-1 to Cys-10, Arg-95 to Arg-104.		IIe-1 to Cys-10, Arg-95 to Phe-106.						,		* * .							Gln-1 to Val-8.			-				
1.	1135		1683	1136									,				1684	1137					٠		
	2 - 379		2 - 325	5 - 502													5 - 502	29 - 277							
	235		783	236	-			-			•						784	237							
	1121919		937640	1174682											-		974396	974395				- 2			
	HSRAA80		·	HHEDF50 1174682			•.											HHEMK34						i e	
	225			226														227							

			,	
H0546: 2, H0545: 2, H0522: 2, H0555: 2, H0583: 1, H0602: 1, H0581: 1, H0488: 1, H0689: 1, H0528: 1 and H0694: 1.	AR089: 2, AR061: 1 S0278: 1 and S0052: 1.		AR089: 37, AR061: 13 S0050: 1, H0031: 1, S0428: 1, S0028: 1, S0031: 1 and S0260: 1.	AR089: 24, AR061: 7 L0777: 5, S0116: 3, L0809: 3, H0696: 3, H0423: 3, S0282: 2, S0354: 2, H0083: 2, H0316: 2, L0763: 2, L0767: 2, L0805: 2, L0776: 2, L0779: 2, S0114: 1, H0657: 1, H0656: 1, S0358: 1,
	Ala-3 to Gly-9, Lys-36 to Glu-42, Ala-49 to Glu-55, Ser-90 to Gln-102, His-134 to Trp-139.	Arg-1 to Ser-6, Lys-23 to Glu-29, Ala-36 to Glu-42, Ser-77 to Gln-89.	Leu-25 to Ala-31, Ala-102 to Ala-108, Ser-285 to Gly-290.	Lys-29 to Arg-34, Glu-121 to Asp-126, Lys-132 to Asp-155.
	1138	1685	1139	1140
	556 - 77	31 - 417	939 - 43	75 - 668
	238	785	239	
·	1105451	723186	1132300	974775
	HMAGK69		HNGNW52	H6EDK67
i	228		229	230

		.							,+																		
																	٠.										
				-		В		*				-							_	1.	3	^		_			<u></u>
40: 1, 19: 1,	33: 1,	59: I,	20: 1, 74: 1	74: 1,	27: 1,	15: 1,	73: 1,	55: 1,	20: 1,	51: 1,	74: 1,	59: 1,	6: 1,	59: 1,	76: 1,	48: 1,	55: 1,	6: 1,	52: 1,	0242:	R061:	731:8	51: 6,	58: 5,	94: 4,	72: 4,	8: 4,
S0360: 1, H0340: S0046: 1, H0619:	10455: 1, H0333:	30574: 1, H0559:	10109: 1, H0156:	l, S0474: 1	, Н0327:	l, H0615:	H0553: 1, H0673:	1, L0065:	1, L0520:	,L0761:	, L0774:	, L0659:	, L0666:	, H06	H0518: 1, S0176:	1, L0748:	l, L0755:	, S0436:	, L0362:	and S0242:	AR089: 16, AR061:	L0747: 11, L0731: 8,	.0740: 7, L0361: 6,	H0657: 5, H0658: 5	H0542: 5, H0494: 4	.0770: 4, L0772: 4,	,0766: 4, L0748: 4,
360: 1 046: 1	0455:)5/4:	0109: 1	H0318:	30049: 1	H0530: 1)553:	H0059: 1	H0207: 1	.0769: 1	.0521: 1	.0655: 1	.0526: 1	664: 1)518:]	10478: 1	.0750: 1	.0731: 1	0608: 1	S0026: 1	3089:	.0747:	740: 7)657:)542: 1	770: 4	766: 4
S S	Ĭ	ĮĘ.	1 0	ĬĦ	SC	퍾	Ħ	Ħ	Ħ	7	걸	끕	크	걾	茧	Ħ	크	되	ĭ	SC	₩.	<u> </u>	크		щ.	Ħ,	ᆿ
					•								<i>:</i>							•	1-29,	s-38,	п-90,	His-175 to Gly-180,	Thr-186 to Gly-202.		
			,	8-								8	•							*	8 유	to Ly	2 to GI	5 to G	6 to G		
								•													Ser-13 to Gln-29,	Pro-31 to Lys-38,	Asp-82 to Gln-90,	His-17	Thr-18		
						,			-												1141				<u>-</u>		
																					_						
			•																		- 880						
																		1	•	-	125 -						
																					241						
	 -								u				: -		·	<u> </u>					332						
	·			_										_							1151532						
				•																	CS43						
																					HWBCS43						
								•					_								231						
<u> </u>		٠										0									2						

					·			_			-									•	,								
																												•	
				_																	•						-		
																*	,												
4,	7: 3,	3: 3,	4: 3,	7: 3,	0: 3,	1: 3,	4: 2,	6: 2,	3: 2,	0: 2,	6: 2,	3: 2,		1: 2,	3:2,	4: 2,	4: 2,	4: 2,	0: 2,	0: 2,	8:2,	4: 2,	4: 2,	0: 1,	9: 1,	5: 1,	8: 1,	3: 1,	5: 1, 2: 1
4, L0758: 4	3, H0587	H0551: 3, H0413:	.0666: 3, H0144:	S0374: 3, H0547:	H0648: 3, L0750: 3,	3, L0581: 3,	H0423: 3, H0624: 2,	10170: 2, H0656: 2,	10341: 2, H0663: 2,	H0638: 2, S0360: 2,	2, H0486:	, vj	2, S0003:	حî	2, L0763: 2,	2, L0764:	2, L0774: 2,	2, L0664: 2,	બ	ď	2, S0028: 2,	2, L0754: 2,	2, S0424:	1, S0040:	Ĺ	1, S0116:	٠,		H0637: 1, S0045:
L0757: 4,	H0580: 3,	H0551:	L0666:	S0374:	H0648:	L0756: 3,	H0423:	H0170:	H0341:	H0638:	S0046: 2,	H0318:	H0266:	H0252:	H0529:	L0769:	L0768: 2,	L0526: 2,	H0689:	H0672:	H0521:	L0751: 2,	H0543: 2,	H0556:	H0294:	L0808:	S0212:	S0354:	H0637: 1
																		•								-			
																												•	
						.*	,					•																	
															*			•							•	-	*		
	· -	<u> </u>			 -						·	 -									•				<u> </u>				
																	<u> </u>				*	_							
										•		ě.														,			
		-	<u>, </u>			,			•						ı.							•	-						
	<u></u>										<u>,</u>															<u></u> .			
																			<i>;</i>										
i						_	<u> </u>						<u> </u>	 -								,				_			

						-				_	_						— <u>·</u>		
														Е					
							<u>.</u>					<u> </u>		-				· · ·	
· ·																			
		0								_^									
H0660: 1, S0330: 1, H0539: 1, S0136: 1, H0552: 1, H0694: 1, H0555: 1, H0576: 1, S0390: 1, S3014: 1, S0027: 1, S0032: 1, L0779: 1, L0752: 1, L0755: 1, L0588: 1, L0591: 1, S0011: 1, S0026: 1, S0276: 1, H0422: 1 and H0506: 1		AR089: 14, AR061: 10	L0439: 12, L0438: 5,	L0741: 4, H0052: 2,	H0009: 2, L0769: 2,	L0794: 2, H0229: 1,	H0572: 1, L0770: 1,	L0796: 1, L0789: 1 and	L0786: 1.	AR051: 15, AR050: 9,	AR089: 7, AR061: 5,	AR054: 1	H0415: 1	AR089: 3, AR061: 2	S6016: 1 and H0428: 1		*	AR061: 2, AR089: 1	H0038: 3, L0748: 3,
	Asp-29 to Gln-37.				٠					Asp-1 to Asp-17,	Pro-61 to Asn-66,	Tyr-84 to Tyr-90,	Ser-103 to Trp-110.	Arg-78 to His-85,	Leu-99 to Lys-104,	Lys-123 to His-132,	Ser-157 to Pro-174.	Gly-53 to Thr-60,	Ser-72 to Ser-88.
	1687	1142								1143				1144				1:145	
	285 - 737	275 - 826	9							3 - 359			,	3 - 539				3 - 1067	
×	787	242								243				244		•		245	
	772564	961681							<u> </u>	947973				947999				1161571	•
		HCE3H71		-						HOFMS43				HOVC014		:		HTOBE75	*
		232								233			_	234		7		235	

	,	-														1								
		104770,	107670,	110700,	135940,	(145001,	146790,	152445,	152445,	159001,	174000,	179755,	182860,	182860,	182860,	191315,	230800,	230800,	266200,	600897,	601105,	601412,	601652,	602491
			-					,	<u> </u>															ā
L0659: 2, L0743: 2, L0744: 2, H0486: 1, H0421: 1, H0024: 1, H0031: 1, H0272: 1, L0662: 1, L0384: 1, L0809: 1 and L0779: 1.		AR051: 86, AR054:	73, AR050: 67, AR089:	10, AR061: 5	H0706: 8, S0366: 5,	S0364: 4, L0485: 4,	L0604: 4, L0777: 3,	L0623: 2, S0362: 2,	H0373: 2, L0520: 2,	L0747: 2, H0624: 1,	H0619: 1, H0550: 1,	H0196: 1, L0646: 1,	L0809: 1, H0693: 1,	S0328: 1 and H0214: 1.	٠									
		Gly-1 to Thr-10,	Ala-14 to Gly-19,	Pro-52 to Val-57,	Pro-85 to Gln-95,	Lys-198 to His-204,	Pro-254 to Glu-260,	Glu-269 to Ser-282,	Glu-302 to Gly-307,	Asp-320 to Asp-326,	Asp-373 to Ser-380,	Ile-396 to Asp-407.										· ·		٠
:	1688	1146						*									•							
,	1 - 414	1 - 1221						,																
	788	246								,			-				•							
	591896	898203									-													
	•	HCMST08								,														
		236																						

									Ė																			
	<u>. </u>			- : -								125264,	134570,	600511,	601556		·		<u></u>		_							- 3
				•		K						6p24-p23														<u>.</u>		
						AR089: 1, AR061: 0	S0222: 1, S0002: 1,	L0804: 1, L0663: 1 and	H0521: 1.	AR089: 41, AR061: 4	H0486: 2	AR089: 1, AR061: 0	L0747: 28, L0588: 22,	L0757: 19, H0251: 15,	S0358: 14, S0045: 13,	L0731: 12, H0551: 10,	H0412: 10, L0771: 10,	L0748: 9, L0758: 9,	H0506: 9, H0556: 8,	S0046: 8, H0622: 8,	H0013: 7, H0623: 7,	L0662: 7, S0192: 7,	S0003: 6, L0659: 6,	L0666: 6, S0328: 6,	L0439: 6, L0750: 6,	L0759: 6, L0599: 6,	L0608: 6, S0040: 5,	S0360: 5, H0581: 5,
Lys-59 to His-65,	Pro-115 to Glu-121,	Glu-163 to Gly-168,	Asp-181 to Asp-187,	Asp-234 to Ser-241,	Ile-257 to Asp-268.	Phe-7 to Pro-15,	Trp-34 to Gly-40.			Ala-2 to Glu-7,	Arg-50 to Glu-58.	Asp-1 to Gly-14,	Ala-60 to Lys-71,	Gln-101 to Glu-118.													•	
1689						1147				1148		1149																
1372 - 569						2 - 685				130 - 342		3 - 605																
789			•			247				248		249															,	
921169						846624				846630		890384																
	- 2-					HDPBS64		-		HDTBR50		HTDAB17		:														
						237				238		239																

WO 01/55301 PCT/US01/01239

											-		,-																	
		.				<u></u>					- <u></u> -						·-		_		<u>·</u>		<u></u> -		<u>: :</u>	·				
							•									:			•											
H0529: 5, L0763: 5,	L0764: 5, L0664: 5,	H0144: 5, S0026: 5,	S0212: 4, H0486: 4,	H0674: 4, L0776: 4,	S0126: 4, H0672: 4,	S0136: 4, L0752: 4,	H0624: 3, S0420: 3,	H0599: 3, H0004: 3,	H0266: 3, H0615: 3,	H0031: 3, H0553: 3,	H0591: 3, H0264: 3,	H0413: 3, H0494: 3,	S0210: 3, L0770: 3,	L0806: 3, H0519: 3,	H0435: 3, L0740: 3,	L0751: 3, L0749: 3,	H0170: 2, H0657: 2,	H0656: 2, S0356: 2,	S0408: 2, H0619: 2,	H0393: 2, H0333: 2,	T0040: 2, H0427: 2,	S0280: 2, H0156: 2,	H0318: 2, H0596: 2,	T0110: 2, H0545: 2,	H0046: 2, H0009: 2,	H0050: 2, L0471: 2,	H0188: 2, H0328: 2,	H0428: 2, L0483: 2,	H0644: 2, H0038: 2,	S0426: 2, L0772: 2,
					٠											-												-	*	
			<u> </u>			_				<u>·</u>	 -	-					·		-			:		-			1			
				,					•		-		_													-	<u> </u>		_	·
					9			 -				-					 -			-		^			·		<u>.</u>	<u>-</u>	-	* .
														·				_										*		
-																														
			_				-	Т.																						

											·•_					<u> </u>					3	-		,					,	
	-	-			<u>.</u> _	-		•	<u></u>	-								1		-						8				
						a	 .	_			•									-								-		
.0646: 2, L0766: 2,	L0651: 2,		L0665: 2,	H0658: 2,	H0521: 2,	10696: 2, S0404: 2,	H0555: 2, S0028: 2,	H0445: 2, L0591: 2,	.0594: 2, H0543: 2,	H0171: 1,	1, S6024: 1,	T0049: 1,	H0661: 1,	H0664: 1,	L0005: 1,	S0376: 1,	1, H0351: 1,	H0431: 1,	, H0403: 1,	, H0587: 1,	l, H0574: 1,	, L0021: 1,	1, H0274: 1,	T0048: 1,	H0434: 1,	, H0196: 1,	H0263: 1,	H0572: 1,	H0620: 1,	H0024: 1,
L0646: 2,	L0649: 2,	L0655: 2,	L0663: 2,	L0352: 2, H0658:	S0152: 2, H0521:	H0696: 2,	H0555: 2,	H0445: 2,	L0594: 2,	H0422: 2, H0171:	H0265: 1,	H0295: 1, T0049:	S0134: 1, H0661:	H0663: 1, H0664:	S0418: 1, L0005:	S0354: 1, S0376:	S0468: 1,	S0220: 1,	H0392: 1,	H0592: 1,	H0642: 1,	H0485: 1,	H0575: 1,	S0346: 1,	S0049: 1, H0434:	H0230: 1,	H0052: 1, H0263:	H0597: 1, H0572:	H0012: 1, H0620:	T0003: 1, H0024:
			•																											
																										16.40				
			•	. -							•	•														٠				
			-													•										4.				٤
		•		•												m-1-*				•									·	
							•	-																						
																										1				

																	•												
															•														
					•				•			· · · ·				•	<u>.</u>			7				ķ.					
												٠																• 4	
-, - <u>,</u>	1,		1,	1,	1,	1,	1,	1,	1,	1,			1,		1,		•		•	-	•	•	•			1,	1,	1,	
l, H0051: l, H0510:	1, H0288:	, H0039: 1	H0628:	H0212:	H0163:	H0040:	H0087:	H0488:	H0268:	l, H0056:	H0100: 1	0450: 1	1, H0633:	, H0647: 1	1, H0652:	L0640: 1	L0372: 1	L0767: 1	L0364: 1	L0650: 1	L0378: 1	L0656: 1	L0647: 1	T0068: 1	H0547:	H0711:	H0659:	, H0648:	S0378: 1
H0057: 1, E H0083: 1, E	, ,	-	Ţ	Ę,	Ŧ,	7	H0634: 1, F	H0477: 1, F	_	H0269: 1, F	S0038: 1, H		H0132: 1, F	S0472: 1, H	7	S0344:1, L	.0371: 1, L			.0794: 1, L	.0375: 1, L		L0783: 1, L		Ĺ,	H0689: 1, F	_	~ ,	S0330: 1, S
00H H00	90H	S0022:	00H	H01	H01	H00	90H	H04	H04	H02	200	H04	H01	S04	90H	S03	<u>103</u>	L03	1.07	107	L03	106	L07	S03	1.04 1.04	90H	H06	90H	S03
																	•		•										
	· 											···	••								7								_
12						<u>.</u>	- ;					*									- -			*					,
													·-	•					-										_
																											•		
			- ,-							;			÷				-										•		-10
							_											, <u>,</u>							,.				_
																									•				
					<u>. </u>											.								<u>.</u>				<u></u>	

																						·							
								٠			,	•		•					•										
							 ,					. –			-			-			<u> </u>			100				-	
		,				_																							
S0380: 1, H0709: 1,	S0146·1 S3012·1	37: 1, S0206: 1,	,0742: 1, L0744: 1,	L0755: 1, H0707: 1,	S0434: 1, S0436: 1,	L0584: 1, L0593: 1,	.0362: 1, S0011: 1,	S0424: 1 and H0293: 1.	AR089: 1, AR061: 0	H0617: 10, L0743: 4,	S0358: 3, H0618: 3,	H0052: 3, H0687: 3,	H0135: 3, H0494: 3,	0646: 3, L0750: 3,	.0731: 3, L0757: 3,	,0601: 3, H0484: 2,	10662: 2, S0418: 2,	10549: 2, H0599: 2,	H0150: 2, H0181: 2,	S	H0529: 2, L0769: 2,	.0649: 2, L0775: 2,	,0663: 2, H0547: 2,	.0742: 2, H0543: 2,	H0556: 1, H0686: 1,	H0685: 1, S0134: 1,	S0218: 1, H0483: 1,	H0661: 1, H0664: 1,	S0360: 1, S0046: 1,
S03	201	S0037:	L07	L07	S04	105	<u>103</u>	S04	AR	H	S03	HOO	H01	106	107	106	90H	H05	HOH 101	0 E	H05	106	200	L07	HOS	90H	S02	90H	S03
				=	·				Gly-8 to Gly-13,	Ala-76 to Ala-81,	Arg-154 to Gly-159,	Arg-338 to Pro-349.	,				8-												
									1150														•						!
				•					1086 - 1							-			1			• •							-
					,				250																		•		
									1227053																				
									HABAE22									,											
									240					·						····						·			

				,	-																<u> </u>									_
			. *	·								_											-							
																					•					*		•		
78: 1, S0222: 1,	`	92: 1, H0257: 1,	86: 1, H0250: 1,	42: 1, H0575: 1,	53: 1, H0505: 1,	18: 1, H0581: 1,	45: 1, L0163: 1,	_	Ĺ,	39: 1, H0031: 1,	H0606: 1, S0366: 1,	16: 1, H0551: 1,	H0059: 1, H0561: 1,	H0647: 1, S0142: 1,	38: 1, S0002: 1,	26: 1, L0770: 1,	74: 1, L0771: 1,	.0768: 1, L0774: 1,	,0378: 1, L0776: 1,	,0807: 1, L0512: 1,	.0659: 1, L0666: 1,	H0435: 1, H0672: 1,	28: 1, S0152: 1,	44: 1, L0751: 1,	17: 1, L0749: 1,	36: 1, L0755: 1,	59: 1, S0434: 1,)2: 1, L0604: 1,	94: 1, L0595: 1,	H0667: 1 and H0542: 1.
S0278:	H0441:	H0592:	H0486:	H0042:	H0253:	H0318:	H0545:	S0051:	S0338:	H0039:	90H	S0036: 1	HOOH	90H	H0538:	S0426: 1	L0374:	L07	L03.	108 108	106 106	H04	S0328:	L0744:	L0747:	L0786:	L0759:	L0592:	L0594:	H06
				•																										
				·	-								<u>_</u>										 ;							
		<u> </u>							_																					*
		-				<u> </u>		•				<u>-</u>			-: -,	-	•	,							<u> </u>				- 10	
*								-					-																7.	
		_			-	10										_														

		,	
			·
•	11: 7 22, 23, 11: 7 11, 11: 7		9. 4, 5, 5, 5, 5, 5, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
	21, AR061; 3, L0163: 2, 2, H0547: 2, 2, L0751: 2, 1, S0051: 1, 1, L0637: 1, 1, L0663: 1, 1, L0663: 1, 1, L0757: 1 e		72, AR08 1, L0839: 3 1, L0839: 3 20010: 2 1, L0809: 2 1, L0601: 2 1, L0601: 2 1, L0601: 3 1, L0601: 3
	NR089: 21, AR061: S0126: 3, L0163: 2, 10426: 2, H0547: 2, 10439: 2, L0751: 2, 10418: 1, S0468: 1, 10673: 1, L0637: 1, 10673: 1, L0663: 1, 10144: 1, S0027: 1, 10752: 1, L0757: 1 ar 10444: 1.		ARO61: 72, ARO8 L0438: 7, L0805 .0779: 4, L0439: 10619: 2, S0010: .0766: 2, L0809: .0754: 2, L0755: .0594: 2, L0601: 10422: 2, S0430: 10656: 1, H0484: 10581: 1, H0327:
	AR089: 21, AR061: 7 S0126: 3, L0163: 2, S0426: 2, H0547: 2, L0439: 2, L0751: 2, S0418: 1, S0468: 1, L0471: 1, S0051: 1, H0673: 1, L0637: 1, H0144: 1, S0027: 1, L0752: 1, L0757: 1 and		AR061: 72, AR089: L0438: 7, L0805: 4, L0779: 4, L0439: 3, H0619: 2, S0010: 2, L0766: 2, L0809: 2, L0594: 2, L0601: 2, H0422: 2, S0430: 1, H0656: 1, H0484: 1, S0360: 1, H0327: 1, H0581: 1, H0327: 1,
88, 11, 27.			S A A A A A A A A A A A A A A A A A A A
1-6, la-34, ly-70, he-16 \rg-19 eu-19	3-8, lu-74, lu-99, Val-12 His-15 Asp-1: cu-24		Ser-24 to Ser-38, Pro-72 to Gly-97, Lys-146 to His-153, Ser-173 to Ser-182, Leu-192 to Gin-201
to Ala 8 to A 1 to G 51 to I 30 to A 16 to I	to Arg 8 to G 8 to G 19 to 7 49 to 1 78 to 7 31 to I		1 to Se 2 to Gi 46 to F 73 to S 92 to (
Arg-1 to Ala-6, Glu-28 to Ala-34, Gln-41 to Gly-70, Ala-161 to Phe-168, Lys-180 to Arg-191, His-193 to Leu-198, Glu-216 to Asp-227.	Gln-1 to Arg-8, Glu-68 to Glu-74, Tyr-93 to Gln-99, Gly-119 to Val-124, Glu-149 to His-154, Asp-178 to Asp-183, Pro-231 to Leu-241.		Ser-24 to Ser-38, Pro-72 to Gly-97, Lys-146 to His-153, Ser-173 to Ser-182, Leu-192 to Gln-201
1690	1151	1691	1152
16	7	16	
3 - 767	3 - 785	-684	609
- E	<u></u>	-	1223 -
790	251	791	252
		_	
965314	1217048	953319	1147850
L		ــــــــــــــــــــــــــــــــــــــ	
	HE9MI70		HHFDK15
- 17	241		242

,	-	. :												
					-									
							•			•				•
				-										
H0050: 1, L0471: 1, H0644: 1, L0768: 1, L0794: 1, L0774: 1, L0776: 1, L0636: 1, L0787: 1, L0665: 1, H0672: 1, H0696: 1, L0751: 1, L0780: 1, L0608: 1, S0194: 1 and H0677: 1.	,	AR061: 6, AR089: 2 L0439: 4, L0770: 2,	L0794: 2, L0438: 2, L0740: 2, H0599: 1,	T0082: 1, S0003: 1,	H0644: 1, L0639: 1,	\$3014: 1, \$0028: 1, \$0206: 1 1.0756: 1	L0779: 1 and L0752: 1.		AR089: 11, AR061: 7	L0/66: 3, L061/: 1, H0069: 1, H0318: 1,	H0050: 1, S0250: 1,	L0804: 1, L0663: 1,	L0750: 1, L0786: 1, L0752: 1 and L0592: 1.	
*	Gly-17 to Thr-26, Glu-93 to Asp-101, Arg-117 to Ala-125.	Gln-10 to Thr-18, Ser-40 to Lys-47,	Lys-59 to Lys-64, Lys-73 to Leu-82,	Asp-145 to Thr-160.					Ala-27 to Ala-36,	Glu-41 to Asp-48, Asp-84 to Lys-92,	Ala-140 to Glu-145,	Leu-168 to Glu-173,	Gln-213 to Ser-218.	Ala-27 to Ala-36,
	1692	1153				÷		1693	1154					1694
:	3380	2 - 481	÷					3 - 461	98 - 817					91 - 615
	792	253					. !	793	254	:				794
	854734	1162664						965875	1151514					838562
		HOSNZ11		. *		•			HTAEW05	o.*				
		243							244					

		i	
	* •		-
		:	16
	AR089: 6, AR061: 6 H0634: 4, H0547: 3, H0521: 3, H0224: 2, H0529: 2, H0144: 2, H0659: 1, S0356: 1, H0660: 1, T0039: 1, H0013: 1, T0110: 1, H0046: 1, H0266: 1, H0032: 1, H0050: 1, H0038: 1, H0551: 1, H0038: 1, H0551: 1, H0509: 1, S0150: 1, H0539: 1, H0518: 1, S0152: 1, S0011: 1 and H0136: 1.		AR089: 1, AR061: 0 H0617: 10, L0743: 4, S0358: 3, H0618: 3, H0052: 3, H0687: 3, H0135: 3, H0494: 3, L0646: 3, L0757: 3, L0731: 3, L0757: 3,
Glu-41 to Asp-48, Asp-84 to Lys-92, Ala-140 to Glu-145.	Gln-2 to Ala-11, Pro-23 to Gly-32, Lys-38 to Gln-52, Thr-57 to Ser-64, Thr-72 to Ala-78, Asp-88 to Asp-93, Lys-107 to Gln-126.	Gly-14 to Glu-38, Asn-90 to Lys-100, Lys-150 to Val-158, Ser-166 to Gly-175.	Gin-3 to Gly-9, Ala-100 to Phe-107, Lys-119 to Arg-130, His-132 to Leu-137, Glu-155 to Ser-167, Val-194 to Pro-204, Gly-225 to Ile-233.
		1695	1156
	249 - 1772	2 - 706	1189 - 353
	255	795	256
·	1181807	914589	923146
	HTTKN45		HUSJN62
	245		246

		_								9																		•		
			•										 :							-					·— ·					
													•																	
2,	-,	.,	2,	2,	2,	~^	2,	2,	,		1,	 			1,	1,	1,		1,	., 	1,	T,		1,			1,	T,	L,	
L0601: 3, H0484: 2,	H0662: 2, S0418: 2,	2, H0599:	2, H0181:	, H0412:	L0769:	L0775:		, H0543:	, H0686:	H0685: 1, S0134:	S0218: 1, H0483:	H0661: 1, H0664:	S0046: 1	1, S0222: 1	, H0438:	, H0257:	, H0250:	, H0575:	, H0505:	1, H0581:	, L0163:	, H0266:	H0428:	, H0031:	, S0366:	H0551:	, H0561:	, S0142:	H0538: 1, S0002:	L0770: 1
L0601: 3	H0662: 2	H0549: 2	H0150: 2	H0087: 2,	H0529: 2,	L0649: 2,	L0663: 2	L0742: 2, H0543:	H0556: 1, H0686:	H0685: 1	S0218: 1,	H0661: 1	S0360: 1,	S0278: 1,	H0441: 1	H0592: 1	H0486: 1,	H0042: 1	H0253: 1	H0318: 1	H0545: 1	S0051: 1,	S0338: 1,	H0039: 1,	H0606: 1,	S0036: 1, H0551:	H0059: 1, H0561:	H0647: 1, S0142:	H0538: 1	S0426: 1,
				•																										
																					•									
 		-	•				-													<u> </u>										
					<u></u>							···	·			· · · · ·														
				!										-					-											ω _.
			-						•																		•			
											,													:						
																													٠.	
					<u> </u>											-		-												

	•											<u></u>	*				_						•					
										,															<u></u>			
L0374: 1, L0771: 1,	L0768: 1, L0774: 1,	•	L0807: 1, L0512: 1,	L0659: 1, L0666: 1,	H0435: 1, H0672: 1,	S0328: 1, S0152: 1,	L0744: 1, L0751: 1,	L0747: 1, L0749: 1,	L0786: 1, L0755: 1,	L0759: 1, S0434: 1,	L0592: 1, L0604: 1,	ئے:	H0667: 1 and H0542: 1.	AR061: 3, AR089: 1	H0038: 3						AR061: 1, AR089: 1	L0748: 8, L0439: 8,	L0766: 5, L0803: 5,	L0749: 4, L0731: 4,	S0046: 3, L0794: 3,	L0805: 3, L0809: 3,	L0666: 3, L0438: 3,	H0543: 3, S0376: 2,
				-						32.				Asp-5 to Arg-13,	Thr-37 to Ser-45,	Ser-131 to Pro-137,	Glu-154 to His-160,	Lys-162 to Arg-168,	Ach 5 to Arg. 13	Thr-37 to Ser-45.								
			•			•	•							. 1157					1606	201	1158		.*					
	-						•							1 - 564			-		1 230	CCC - 1	1-1911				-			
			-											257					70%	2	258		- 0.					
											<u> </u>			1102681					070650	300076	1105267							
														HTEIU92				8			HAQMD86 1105267							
														247							248							

PCT/US01/01239

																					٠									
	-					-	 ,			-	<u></u>		-													.				
				.*																										
							•																							
							.				·																			<u> </u>
3: 2.	5: 2,	9:2,	4: 2,	9: 2,	7:2,	0:2,	5: 2,	6: 1,	8: 1,	8: 1,	5: 1,	9: 1,		3: 1,	8: 1 ,	4: 1,	8: 1,	74: 1,	53: 1,	6: 1,	3: 1,	1: 1,	0: 1,	4: 1,	3: 1,	5: 1,	9: 1,	22: 1,	1:1,	/: 1,
S0007: 2, H0373: 2.	H0644: 2, L0455:	L0769:	L0804:	L0789:	H0627:	L0740:	L0595:	H0170: 1, H0656:	S0116: 1, H0638:	H0125: 1, S0418:	S0420: 1, S0356:	H0619:	H0411: 1, H0586:	H0486: 1, H0013:	H0098:	H0004:	S6028:	H0674:	H0063:	H0646:	L0763:	L0761:	1080	L0764:	L0783:	L056	H0659:	H0522:	L0751:	1, 10///:
7:2.	44: 2,	0598: 2,	.0646: 2,	.0774: 2,	H0521: 2,	.0743: 2,	.0754: 2,	70: 1,	16: 1,	25: 1,	20:1,	50: 1,	11:1,	86: 1,	, Li	<u> </u>	٠ ټـ	٦,	1,	Ļ	-	£,	Ţ,	Ť	•	H0144: 1,	H0593: 1,	H0658: 1,)2: 1,	47: 1,
2000	H06	105	106 106	L07	H05	107	1.07	HOI	S01	H01	S04	S0360:	H04	H04	L0021:	H0575:	H0052:	H0266:	H0090:)H	L0640:	L0770:	L0373:	L0641:	L0773:	H01	H05	90H	S0392:	L0747:
	• •																													
																				٠.										
	•			•.			•													•										
		,		:			e.	•																						
		•																•								1		8		
_																												<u></u>	_	
	٠			;																										
																				• (•					٠	
-														•				-			•		-							
																					W	•								
										*																,				
				•														_												
K														•																
_	-							<u></u>	•						<u> </u>	+					-					*	 -			
										•		•																		

					·
			9		41
L0755: 1, L0757: 1, L0759: 1, S0026: 1, S0242: 1 and H0542: 1.	AR089: 79, AR061: 26 L0002: 1, H0156: 1, L0021: 1, H0318: 1, H0561: 1, L0662: 1, L0794: 1, L0766: 1, S0026: 1, H0542: 1 and H0506: 1.		AR061: 8, AR089: 4 S0426: 2, S0126: 2, H0318: 1 and H0050: 1.		AR089: 8, AR061: 8 L0439: 13, L0438: 4, H0046: 3, L0663: 3, H0556: 2, H0023: 2, T0010: 2, L0769: 2,
Tyr-1 to Gly-6.	Arg-12 to Tyr-23, Ser-93 to Thr-98, Lys-108 to Ser-113, Met-124 to Trp-129, Asp-173 to Ser-181, Pro-208 to Leu-213, Met-226 to Ser-231, Thr-250 to Pro-256, Glu-263 to Glu-273, Glu-263 to Arg-306.		Lys-49 to Thr-61, Ser-75 to Val-92, Phe-96 to Pro-124, Leu-139 to Ile-146.	Lys-47 to Thr-59, Ser-73 to Val-90, Phe-94 to Pro-122, Leu-137 to Ile-144, Ile-197 to Trp-205, Glu-219 to Gly-228.	Gly-7 to Tyr-15.
1697	1159	1698	1160	1699	1161
2-1912	501 - 1418	2 - 1087	2 - 532	1 - 924	2117 - 288
797	259	798	260	799	261
961459	1151462	919508	1151463	960507	1195500
	HBJJG02		HBJJN65		HBMU135
	249		250		251

*		
L0655: 2, H0436: 2, L0743: 2, L0744: 2, L0748: 2, L0754: 2, L0747: 2, L0731: 2, L0759: 2, L0605: 2, S0116: 1, S0418: 1, H0619: 1, H0261: 1, S0222: 1, H0333: 1, H0050: 1, H0620: 1, H0050: 1, H0674: 1, S0364: 1, H0674: 1, C076: 1, L0762: 1, L0796: 1, L0762: 1, L0796: 1, L0761: 1, L0796: 1, L0761: 1, L0759: 1, L0809: 1, L0652: 1, L0809: 1, L0665: 1, L0859: 1, L0778: 1, L0756: 1, L0779: 1, L0756: 1, L0779: 1, L0756: 1, L0779: 1, L0756: 1, L0779: 1, L0756: 1,		AR061: 7, AR089: 5 H0052: 3, H0135: 3, L0794: 3, L0439: 3, L0749: 3, H0583: 2,
		Asp-7 to Glu-28, Ser-42 to Asp-69, Gln-79 to Asp-102, Leu-105 to Cys-112,
	1700	1162
*	627 - 253	1 (
	800	262
	956041	1227635
		HCEBP60
		252

PCT/HS01/01230

													_			0											-		
			-		 -						<u>-</u>			-							<u>-</u>		*						
											٠,	٠																	
L								-																			٠,	and	
CEO. O TIONED: O	EUSSU: 2, FIUZSS: 2,	S0002: 2, L0/69: 2,	.0783: 2, H0547: 2,	10555: 2, L0748: 2,	.0747: 2, L0750: 2,	.0758: 2, H0295: 1,	30114: 1, S0134: 1,	H0255: 1, H0305: 1,	S0420: 1, L0618: 1,	^	H0619: 1, H0261: 1,	S0222: 1, H0635: 1,	.0082: 1, H0318: 1,	,0040: 1, H0545: 1,	H0201: 1, L0052: 1,	10688: 1, H0213: 1,	H0031: 1, H0634: 1,	H0087: 1, H0488: 1,	10561: 1, S0210: 1,	.0639: 1, L0662: 1,	,0768: 1, L0803: 1,	,0655: 1, L0661: 1,	.0658: 1, L0809: 1,	.0666: 1, L0438: 1,	HO539: 1, S0378: 1,	H0518: 1, H0521: 1,	.0741: 1, H0707: 1,	1, H0423: 1	H0422: 1.
Tro			Н.		ᆽ	H	01				_	S02	TOC	ğ	HO	HO	HO	ЮH	HO	2	107	100	Loe	100	HO	H	107	3	
41- 100 4- 0 120	Ala-122 to Ser-132,	GIY-151 to Arg-101,	Glu-270 to Tyr-277,	Cys-282 to Lys-290,	Arg-402 to Glu-407,	Gly-553 to Pro-561,	Gly-615 to Gly-631,	Pro-652 to Arg-660,	Pro-662 to Ala-667,	Pro-761 to Gly-768,	Ser-792 to Ser-806.														-				
																					٠						· .		1701
				,				•														_							3 - 365
																						-							801
												-																	812297
					·		•						,		•														-

											,	•									,	•			Y			
																									<u></u>			_
AR061: 1, AR089: 1	H0046: 3, L0663: 3,	H0556: 2, H0023: 2,	T0010: 2, L0769: 2,	L0655: 2, H0436: 2,	L0743: 2, L0744: 2,	L0748: 2, L0754: 2,	L0747: 2, L0731: 2,	L0759: 2, L0605: 2,	S0116: 1, S0418: 1,	H0619: 1, H0261: 1,	S0222: 1, H0333: 1,	H0492: 1, H0599: 1,	H0052: 1, H0178: 1,	H0050: 1, H0620: 1,	H0179: 1, H0674: 1,	S0364: 1, H0708: 1,	H0100: 1, S0440: 1,	S0142: 1, L0762: 1,	L0796: 1, L0761: 1,	\Box	L0766: 1, L0805: 1,	<u> </u>	L0783: 1, L0809: 1,	L0665: 1, L0352: 1,	H0660: 1, H0555: 1,	L0749: 1, L0756: 1,	L0777: 1, L0758: 1,	L0595: 1 and H0542: 1.
Phe-6 to Glu-15,	Asp-21 to Leu-33, Met-141 to Cys-147.			_													-3-	•								•		
1163														-														
1 - 444										,											,							
263																•			٠	•								
1150870				•		-																						
HFGMA55 1150870	-																											
253														_														

·													_					•		<u>.</u>	_							_	
								•													,								
																-				-									•
	AR050: 526, AR054:	486, AR051: 283,	AR089: 1, AR061: 1	L0439: 5, L0662: 4,	H0543: 4, L0766: 3,	L0665: 3, L0751: 3,	L0777: 3, H0618: 2,	H0052: 2, H0024: 2,	L0666: 2, H0265: 1,	S0212: 1, H0580: 1,	H0208: 1, H0393: 1,	H0549: 1, H0550: 1,	S0222: 1, H0333: 1,	H0559: 1, H0486: 1,	T0114: 1, S0049: 1,	H0041: 1, H0083: 1,	H0615: 1, L0055: 1,	H0135: 1, H0038: 1,	H0634: 1, H0616: 1,	H0413: 1, L0370: 1,	L0770: 1, L0800: 1,	L0768: 1, L0794: 1,	L0803: 1, L0804: 1,	L0653: 1, L0658: 1,	L0789: 1, H0520: 1,	H0660: 1, S0044: 1,	S0146: 1, L0743: 1,	L0740: 1, L0749: 1,	
Thr-5 to Glu-13, Asp-19 to Leu-31.							•									•		-	*.	• .						•			
1702	1164																												
3-416	1 - 1203										-										·								,
802	264												•		•											•			
858681	789603																						-						
	HLHTE91			-														-	,									<u>.</u>	
	254												·																-

					-																						
			•																						•		
	<u>.</u>					*														·			- -				. <u>.</u>
<u> </u>																							_				·
L0750: 1, L0779: 1, L0752: 1, L0755: 1, L0731: 1 and H0423: 1.											*	AR061: 2, AR089: 1	L0777: 5, H0662: 3,	H0251: 3, L0752: 3,	.0759: 3, L0593: 3,	.0771: 2, L0766: 2,	,0666: 2, H0436: 2,	.0745: 2, L0747: 2,	.0779: 2, L0758: 2,	H0650: 1, H0638: 1,	S0358: 1, L0717: 1,	H0586: 1, H0024: 1,	H0373: 1, S0388: 1,		S0003: 1, H0031: 1,	H0551: 1, T0067: 1,	S0422: 1, L0520: 1,
L ZZZ		-	•				^					Æ	-	正	7	ቯ	<u> </u>	ĭ	ם	耳	<u>8</u>	Ē	Ĭ	<u>8</u>	<u>x</u>	耳	S
	Leu-16 to Lys-21,	Arg-30 to Pro-36,	Ser-44 to Thr-49,	Arg-136 to Arg-150,	Leu-160 to Cys-173,	Glu-223 to Gly-228,	Gly-241 to Gln-249,	Ala-260 to Gly-265,	Ile-334 to Thr-349,	Arg-364 to Glu-371		Glu-9 to Ser-17,	Phe-25 to Ala-34,	Thr-43 to Asn-53,	Met-172 to Gln-177								,			-	
	1703										1704	1165															
_	3 - 1151		•	-							618 - 355	2 - 625						•									
	803				٠						804	265															
·	868803										969604	1151495												-			
												HLYFI58	•			•				•				×			
-										7		255															

											•						•	
L0638: 1, L0761: 1, L0764: 1, L0662: 1, L0768: 1, L0774: 1, L0775: 1, L0518: 1, L0790: 1, H0520: 1, H0547: 1, H0666: 1, H0672: 1, L0756: 1, L0753: 1, L0757: 1, H0445: 1, S0026: 1,				AR089: 1, AR061: 0	H0677: 2						-							
3	Glu-9 to Ser-17,	Phe-25 to Ala-34,	Thr-43 to Asn-53, Met-172 to Gln-177.	Gln-9 to Lys-18,	Gly-33 to Leu-64.	Arg-12 to Trp-26,	Thr-28 to Glu-37,	Leu-46 to Lys-51,	Thr-85 to Glu-92,	Arg-114 to Lys-119,	Pro-191 to Asn-208,	Lys-214 to Thr-224,	Thr-242 to Asn-251,	Ser-279 to Tyr-284,	Leu-330 to Cys-344,	Glu-364 to Tyr-369,	Ile-375 to Met-384,	Asp-413 to Ser-420,
	1705			1166		1706												
	2 - 625			53 - 262		10 - 1665			-		•							
	805			266		908		:									-	
	924193			1151312		915273												
			•	HNNBJ44														
				256														

· .	·								<u> </u>								
	•										*			-			*
	AR089: 1, AR061: 0 H0521: 1 and S0390: 1.		AR061: 0, AR089: 0	H0617: 2, L0589: 2,	H0575: 1, H0251: 1.	H0616: 1, L0775: 1,	L0651: 1, L0665: 1,	•••	L0/31: 1, L0/58: 1 and S0424: 1.			AR089: 14, AR061: 7	H0641: 4, L0596: 4,	H0422: 4, L0768: 3,	L0779: 3, L0758: 3,	T0049: 2, H0486: 2,	H0521: 2, H0522: 2, L0748: 2, L0747: 2,
Lys-457 to Pro-470, Gly-478 to Gln-483, Phe-519 to Cys-533.	Lys-1 to Gly-14, Gly-23 to Met-43, Ala-87 to Pro-99, Ile-101 to Ile-121, Gln-126 to Val-135, Val-139 to Cys-147.	Lys-1 to Gly-14, Gly-23 to Ser-40.	Ser-18 to Arg-25,	Leu-45 to Pro-62,	Arg-143 to Gln-158	His-194 to Glu-203.			•	Cys-10 to Lys-27,	Arg-86 to Gln-101, His-137 to Glu-146.	Ala-30 to Pro-36,	Glu-59 to Thr-71,	Ser-77 to Leu-90.			
	1167	1707	1168	-					•	1708		1169				_	
	1 - 540	1 - 1551	1 - 609							179 - 616		3-317			<u> </u>		
	267	807	268							808		269					
	997643	883028	1151518						,	914561		1164014					
	HSLJ146		HTFOK70									HUSX071					
	257		258									259					

								· .							_				·		
	•					. •	,														
,																					
				_																	
				*																	
										•											
L	•							<u> </u>			_		_				.				
2,1,1,	, , , ,		٠	Ļ,	, 1, 1,	1, 23: 1				L0439: 26, L0748: 22,	ó,	ó,	4,	ຕົ	ຕົ	ج رث	3.	ر. د	4	ζ,	3
20777: 2, L0608: 2, 20601: 2, L0617: 1, H0581: 1, H0581: 1	H0553: H0477:	L0372: L0806:	L0809:	.0789: 1, H0658:	H0648: 1, H0518: L0750: 1, L0752:	.0731: 1, L0759: 1, .0590: 1 and H0423			2, AR061	.074	0744: 7, L0803: 6,	.0805: 6, L0750: 6,	309:	731:	.29:	H0171:	L0157:	.0471: 2, H0266: 2,	302:	H0529: 2, L0667: 2,	
20777: 2, L0608: 20601: 2, L0617: 30497: 1, H0581: 40544: 1, L0471:	HH.	i, i	Si	Ĕ,	员员	20731: 1, L0759: 20590: 1 and H04			2, A	26, I	ŭ,	Ĭ.	H0013: 4, L0809:	L0731	.0758: 3, L0759:	, но	j,	, H0	H0059: 2, S0002:	Ĭ,	L0800: 2, L0776:
, 2, 2, 4, 1, 2, 4, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	H0687: 1,	10413: 1, 20774: 1,	.0659: 1,	1.	10648: 1, .0750: 1,	1.0	•		:63	39:	4:7	5:6	13:4	.0766: 3, I	ώ 	H0624: 2,	H0156: 2,	1:2	59:2	29:2	0:2
.00777: .0601: .10497:	H0687: 1, H0553: H0090: 1, H0477:	H0413: 1, L0774: 1,	7065	2078	790E 1075	L073			AR089	L04	L074	2807	H00]	207	507	H062	H01.	L047	H00,	H052	2807
		 -	نص	نات								ر ب	~ 	ر ک	^^		3,	<u> </u>	7,		4,
	•							35.	82	53,	73,	Asp-103 to Trp-112,	Cys-134 to Trp-158,	Arg-167 to Asn-172,	Pro-200 to Arg-217,	Val-225 to Lys-231,	Lys-255 to Asp-263,	Tyr-303 to Leu-310,	Asp-399 to Cys-407,	Ser-446 to Gly-464,	Asp-478 to Asn-484,
							Arg-1 to Gly-7, Leu-9 to Ser-16.	Arg-25 to Cys-35	Glu-19 to Gln-29,	Arg-48 to Ser-53,	Glu-57 to Lys-73,	, TH	Trp	Ası	Arg	Lys	Asi	Leu	Š	सु	AS.
						•	to G	5 to	0 to	\$ \$	7 to	03 tc	34 tc	57 tc) (2	25 to	55 to)3 to	99 tc	16 to	78 tc
	•			٠.			rg-1	19-2	151	rg-48	lu-5,	sp-1	ys-1.	rg-1(0-5	al-22	ys-2.	yr-3(sp-3	Fr-44	Sp-4
							4 1	\	S	4	Ü	₹	<u>ن</u>	₹	<u>~</u>	>	<u>ਜ਼</u>	<u>–</u>	A	Š	Y
							1709		1170												
						4.	1,		_												
							514		39												
							648 - 1		2 - 2239												1
	*						648		7												
							0		0							•					l
							809		270												
							49		861									-			
							862649		1223498												
							100		1		<u> </u>								-		
				٠.					HWBDP39												
1									WB												
									厂							-			_		
						•			260				•								
									<u> </u>												

···	,							,		, .									-					•					
<u> </u>						-		<u>. </u>													نيسې								
			٠.																			•							
													_					*	•					_	_				•
L0659: 2, H0144: 2, L0740: 2, L0747: 2,	L0752: 2, T0002: 1,	H0650: 1, H0657: 1,	L0425: 1, L0481: 1,	S0418: 1, H0580: 1,	H0351: 1, H0587: 1,	H0333: 1, S0010: 1,	S0346: 1, H0581: 1,	H0596: 1, H0597: 1,	H0457: 1, H0086: 1,	H0172: 1, H0014: 1,	H0373: 1, T0010: 1,	H0083: 1, S0003: 1,	H0328: 1, H0615: 1,	H0119: 1, H0644: 1,	S0366: 1, H0090: 1,	H0038: 1, H0538: 1,	L0770: 1, L0646: 1,	L0374: 1, L0662: 1,	L0768: 1, L0794: 1,	L0804: 1, L0774: 1,	L0789: 1, L0532: 1,	L0666: 1, H0547: 1,	H0519: 1, H0666: 1,	S0152: 1, H0696: 1,	H0555: 1, L0356: 1,	<u>_</u>	S0260: 1, H0445: 1,	S0434: 1, L0604: 1,	L0601: 1, S0192: 1,
Gln-566 to Asn-577, Ser-614 to Cys-622,	Phe-643 to His-648,	Gln-658 to Phe-682,	Asn-700 to Glu-729,	Leu-737 to Asp-745.			=												·										,
			•																		•					*			
				0				 -								-		•	•	•			•	-			v		
		-								-																			
																													·
		•							<u></u>											<u>·</u>					<u> </u>			 -	

					-			·															- ;		•
												 _	-	-	, -			·						<u>.</u>	
	-																								
S0194: 1, H0542: 1, H0543: 1 and H0352: 1.			AR051: 19, AR050: 9,	AR054: 8	H0431: 1, H0096: 1,	L0659: 1 and H0506: 1.				AR061: 1, AR089: 1	H0038: 1, H0672: 1	and L0758: 1.		AR089: 1. AR061: 0	L0731: 6, H0012: 5,	L0803: 4, S0028: 4,	H0497: 3, H0581: 3,	H0561: 3, L0769: 3,	S0418: 2, H0599: 2,	L0770: 2, L0771: 2,	S0266: 2, L0757: 2,	L0591: 2, L0594: 2,	L0362: 2, H0668: 2,	H0542: 2, H0171: 1,	S6024: 1, H0341: 1, H0483: 1, H0663: 1,
	Glu-19 to Gln-29,	Glu-57 to Lys-73.	Gly-1 to Glu-6,	Pro-18 to Lys-26,	Glu-29 to Gly-36,	Leu-104 to Ser-111,	Asn-123 to Gly-130,	His-134 to Lys-139.	Ser-7 to Lys-29.				Glu-38 to Lys-43,					,					-		
	1710		1171				•		1711	1172	•		1712	1173				-							
	2 - 394		1-417						66 - 257	557-3		ĭ.	2 - 397	165 - 1322			V.								
	810		271	•		•			811	272	-		812	273						**			-		
	810403		840459						949559	1179755			933167	981972											
			HKMMQ73						•	HVVBK72				H7TXB52											
			261							797				263											

·		i			·		
						·—	
சுசுதுசுசு நேசுந்	L0775: 1, L0776: 1, L0655: 1, L0606: 1, L0659: 1, L0809: 1, L0367: 1, L0789: 1, L0663: 1, H0144: 1,	S0148: 1, H0519: 1, S0126: 1, H0478: 1, L0751: 1, L0750: 1, L0756: 1, L0759: 1, H0444: 1, S0196: 1 and	Н0543: 1.	AR050: 58, AR054: 53, AR051: 41, AR089:	1, AR061: 0 H0644: 2, H0265: 1, S0001: 1, S0358: 1,		H0052: 1, H0263: 1, H0051: 1, H0416: 1, H0212: 1, L0796: 1,
HEHHEL	<u> </u>	<u>88977</u>	E	Gly-92 to Pro-97, A Cys-107 to Gln-131, 53	Pro-139 to Ala-147, 1, Pro-149 to Arg-160, I Thr-194 to Pro-206. Sc		
	*		1713	1174		*	
			165 - 1322	1365 - 661			
			813	274		, 	
			910910	1217205			
				HDPRY71			
				264			

8														-	,								
	*											*											
S0378: 1, H0521: 1, H0522: 1, S3014: 1, S0027: 1 and L0747: 1.		AR061: 210, AR089:	L0758: 3, S0364: 2,	L0747: 2, S0278: 1,	L0622: 1, H0018: 1,	L0783: 1, L0809: 1, L0791: 1 and L0759: 1.				AR061: 8, AR089: 5 H0615: 3	AR089: 4, AR061: 2	H0438: 3 and S0260: 1.			•						AR089: 15, AR061: 10	L0750: 9, L0754: 5,	L0779: 5, L0755: 4,
	Arg-85 to Lys-92, Leu-102 to Glu-115.					-				Thr-50 to Gln-57.	Gln-20 to Ser-28,	Lys-31 to Arg-38,	Asn-81 to His-93,	Asn-148 to Asp-155,	Met-182 to Gly-189,	Pro-236 to Arg-243,	Ala-258 to Ala-263,	Pro-298 to Cys-304,	Val-325 to Ala-333.		Arg-1 to Lys-10,	Gly-171 to Leu-176,	Arg-217 to Arg-222,
	1714	1175					1715	1176	1716	1177	1178				•			•		1717	1179		
	441 - 806	1 - 360		•.	,	*	518 - 240	1 - 2073	2 - 574	43 - 324	2 - 1003			•						1 - 291	790 - 2		
	814	275			*		815	276	816	277	278	,			`					817	279		
	971345	692896				-	971583	1077517	916885	973449	1229467								· · ·	576093	1121932		
		HGOCA12		•		*		HHCJ29		HODGC61	HBXGQ52 1229467	,									HE2JS39	,	
		265						266		267	268										269		

					-		-												-		
	-						•			•						-					
L0360: 4, S0330: 3, L0747: 3, L0749: 2, L0777: 2, H0624: 1, H0650: 1, H0656: 1, S0376: 1, H0550: 1, H0592: 1, L0638: 1, H0689: 1, H0660: 1, L0731: 1, L0757: 1, L0759: 1 and L0359: 1.	1	AR089: 1, AR061: 0	L0439: 5, L0592: 3,	H0052: 2, L0438: 2,	L0741: 2, L0747: 2,	S0001: 1, L0005: 1,		L0109: 1, H0009: 1,	H0051: 1, L0769: 1,	L0594: 1 and L0595: 1.	AR061: 4, AR089: 3	H0038: 2, L0439: 2,	H0013: 1, S0010: 1,	S6028: 1, H0090: 1,	H0560: 1 and L0438: 1.			AR089: 820, AR061:	06	S0045: 1, S0278: 1,	HU01/: 1 and SU044: 1.
Glu-226 to Glu-232, Leu-257 to Ser-262.	Gly-1 to Gly-6.	Pro-11 to Ser-20,	Ala-35 to Pro-41,	'Gln-88 to Trp-95,	Arg-111 to Asp-119.						Val-20 to Gln-36,	Arg-67 to Glu-78,	Pro-154 to Phe-159.			Asn-1 to Gln-9,	Arg-40 to Glu-51.	Arg-6 to Gln-13,	Thr-44 to Ser-50,	Pro-145 to Asn-168.	
	1718	1180				•					1181					1719	-	1182			
	51 - 716	3 - 1124									2 - 478					2 - 397		3 - 512			
	818	280				,					281					819		282			
	957854	960302									1103488					675329		944301			
		HE7SH21			0						HMIA023							HELDW45			
		270									271					•		272			

					·							•	•		
														*	
AR089: 8, AR061: 8 H0038: 3, S0418: 1, S0132: 1, H0261: 1, H0574: 1, H0046: 1, S0364: 1, S0011: 1 and S0192: 1.		AR089: 17, AR061: 14 H0616: 2		•	AR089: 0, AR061: 0 H0013: 3, H0271: 2 and H0171: 1.		AR051: 12, AR054: 9, AR061: 5, AR089: 2,	AR050: 0 H0036: 2 H0590: 2	S0354: 1, H0510: 1 and L0748: 1.				,	AR089: 1, AR061: 0 H0624: 1 S6026: 1	\$0278: 1, \$0051: 1,
Tyr-14 to Cys-23, Arg-41 to Lys-46, Ser-53 to Asp-74, Glu-106 to Gln-116, Ser-129 to Leu-135.		Gly-40 to Val-46, His-66 to Ser-72,	Trp-83 to Gly-88, Trp-143 to Gly-149.	Gly-38 to Val-44.	Ala-76 to Gly-82, Thr-98 to Leu-105, Glu-126 to Ala-132.		-	<i>-</i>			Glu-40 to Trp-57,	Tyr-59 to Phe-64,	Asp-106 to Arg-114.	Val-22 to Asp-27,	Thr-48 to Glu-54,
1183	1720	1184		1721	1185	1722	1186			1723	1724			1187	
3 - 509	929 - 1676	2 - 514		2 - 445	1 - 468	2 - 289	2 - 748			1 - 501	12 - 419			20 - 1666	·
283	820	284		821	285	822	286			823	824			287	
1121889	958210	1151517		870566	1106571	524511	1211446			775139	830774			1226192	
HSRBB31		HTEOW39			HE2PE32		нѕБЖ39							HPMLD30	
273		274			275		276							277	

-			_															
																		*
					·		-;-		_						-	-		
						-												
H0416: 1, H0644: 1, S0052: 1, S0053: 1, S0028: 1, S0032: 1, S0031: 1 and S0260: 1.		AR061: 5, AR089: 2 L0754: 10, S0002: 3,	L0766: 3, H0539: 3,	H0370: 2, H0575: 2,	H0581: 2, S0003: 2, H0038: 2, S0126: 2	L0751: 2, L0779: 2,	L0758: 2, H0543: 2,	H0664: 1, S0376: 1,	H0639: 1, H0644: 1,	L0055: 1, H0674: 1,	H0090: 1, H0264: 1,	H0561: 1, H0529: 1,	L0640: 1, L0649: 1,	L0803: 1, L0806: 1,	H0684: 1, L0752: 1,	L0753: 1, H0445: 1,	L0608: 1 and L0362: 1.	
Lys-61 to Pro-68, Ser-80 to Ser-89, Asp-96 to Phe-101, Leu-146 to Asp-153, Asp-169 to Val-174, Lys-219 to Gly-234, Leu-241 to Gln-247, Asp-269 to Ala-278, Asp-281 to Trp-289.		Arg-12 to Arg-19, Trp-24 to Gly-35,	Pro-42 to Arg-54,	Ala-56 to Ser-61,	Thr-78 to Asp-83,	Lvs-174 to Lvs-182.	Lys-199 to Phe-210,	Thr-222 to Ile-227.				•						Arg-5 to Arg-12, Trp-17 to Gly-28,
	1725	1188			•	ī		•										1726
-	6 - 521	1 - 897		_														3 - 1055
	825	288							•									826
	937414	1204712																931049
		HOEKP17														-		
		278																

		_					· .		-	• • • •	•												•					
																	 .							_				
		•						•		-							•*											
					•	AR089: 0, AR061: 0	S0028: 4, S0126: 2,	S0001: 1, S0282: 1,	S0049: 1, S0050: 1,	H0271: 1, H0388: 1 and	S0390: 1.		AR061: 6, AR089: 3	L0755: 5, L0777: 4,	L0752: 4, H0657: 3,	S0016: 3, L0803: 3,	S0330: 3, L0748: 3,	L0740: 3, L0757: 3,	H0622: 2, L0653: 2,	L0666: 2, L0754: 2,	L0779: 2, L0758: 2,	S0040: 1, H0662: 1,	L0481: 1, H0638: 1,	`	H0393: 1, L0717: 1,	H0586: 1, H0575: 1,	H0052: 1, H0251: 1,	L0157: 1, H0057: 1, S0003: 1, T0041: 1,
Pro-35 to Arg-47,	Ala-49 to Ser-54.	Thr-71 to Asp-76,	Thr-88 to Cys-101,	Lys-167 to Lys-175,	Lys-192 to Tyr-197.	Pro-18 to Trp-24,	Thr-32 to Asp-37,	Arg-101 to Asp-107,	Ala-148 to Ala-154,	Gln-259 to Phe-264.		Ala-21 to Ala-27.	Pro-49 to Ala-59,	Pro-127 to Phe-133,	Arg-162 to Asn-173,	Cys-183 to Asp-189,	Lys-290 to Tyr-295.		-									
		-		_		1189				·		1727	1190		•								=					
					,	198 - 1205						266 - 616	2 - 904	•														
						289						827	290															
			•			1228141				-		526951	1199933															
						HFXDP67							HJABA59															
				•		279							280															

							•	•				. ,	:			
	• =															* .
L0794: 1, L0766: 1, L0522: 1, L0659: 1, L0789: 1, L0664: 1, L0665: 1, H0144: 1, S0374: 1, H0648: 1, L0439: 1, L0780: 1, L0731: 1, L0759: 1, L0591: 1 and S0192: 1.		AR061: 5, AR089: 4 H0441: 2		AR061: 4, AR089: 2	L0774: 4, L0803: 2,	S0418: 1, S0360: 1,		S0214: 1, H0551: 1,	L0662: 1, L0767: 1,	<u> </u>	L0665: 1, H0660: 1 and L0777: 1				AR089: 1, AR061: 0	H0090: 2, L0794: 2, L0605: 2, L0485: 2,
	Arg-6 to Phe-11, Arg-40 to Asn-51, Cys-61 to Asp-67.	Arg-1 to Val-10, Ala-36 to Gly-47, Leu-66 to Ser-79.	Arg-1 to Val-10.	Gln-22 to Lys-28,	Asp-69 to Leu-76,	Phe-105 to Tyr-113,	Leu-181 to Thr-190,	Tyr-194 to Ser-200.				Gln-22 to Lys-28,	Asp-69 to Leu-76,	Phe-105 to Tyr-113.	Tyr-87 to Pro-92,	Gln-119 to Ser-124, Glu-152 to Tyr-160.
	1728	1191	1729	1192			•					1730			1193	·
	366 - 902	25 - 324	21 - 371	1 - 600				_	•			1 - 600			1 - 555	
	828	291	829	292				,	•			830			293	
	713642	1129055	924636	1124742								096119			1151491	
		HKIXB03		HKMMF49											HLDOG51	
		281	,	282											283	

						-							*				
	<u>.</u>										<u> </u>			•		-	
							,					_					
S0354: 1, H0581: 1, H0052: 1, H0046: 1, H0510: 1, L0769: 1, L0363: 1, L0804: 1, L0755: 1, L0592: 1, S0242: 1 and H0422: 1.		AR089: 12, AR061: 9 L0752: 2, H0309: 1, L0518: 1 and S0152: 1.		AR061: 7, AR089: 5	L0768: 3, L0439: 3,	H0618: 2, H0253: 2,	H0620: 2, H0616: 2, H0561: 2, 1,0764: 2	L0766: 2, L0653: 2,	H0539: 2, L0744: 2,	L0747: 2, L0750: 2,	H0318: 1, H0123: 1,		S0036: 1, H0038: 1,	L0630: 1, L0772: 1,	L0771: 1, L0794: 1,	L0806: 1, L0809: 1,	L0666: 1, L0438: 1,
	Lys-46 to His-53, Tyr-135 to Pro-140, Gln-167 to Ser-172, Glu-200 to Tyr-208, Gln-298 to Pro-305.	,		Glu-1 to Pro-9,	Val-48 to Gly-55,	Pro-70 to Thr-79,	Arg-94 to Arg-99,	Thr-146 to Arg-154,	Thr-179 to Asp-185,	Pro-194 to Ser-200,	Pro-215 to Thr-220.						
	1731	1194	1732	1195		8		-									
	11 - 955	787 - 593	99 - 245	213 - 962													
	831	294	832	295						,							
	918840	1130819	577154	924635									-				
·		HSVAI25		HSXCP56										,			
		284		285						•							

		•	-				•	_				•		<u></u>											<u> </u>				
										-									*										
									. *	•																			
_	· <u>-</u>			·				*				,.													٠.	.			
H0682: 1, H0683: 1,	.0756: 1, L0780: 1,	.0752: 1, L0731: 1,	.0758: 1 and L0759: 1.	AR089: 1, AR061: 1	L0747: 24, L0591: 17,	J0794: 15, L0777: 15,	.0588: 10, L0750: 9,	.0599: 9, S0046: 8,	H0013: 8, H0619: 7,	C0040: 7, L0748: 7,	.0731: 7, L0665: 6,		H0123: 5, L0471: 5,	H0024: 5, L0754: 5,	.0717: 4, H0333: 4,	H0050: 4, H0286: 4,	H0124: 4, L0770: 4,	.0375: 4, H0144: 4,	S0027: 4, L0749: 4,		.0595: 4, H0170: 3,	S0360: 3, H0208: 3,	H0178: 3, H0012: 3,	H0551: 3, H0100: 3,	H0494: 3, L0763: 3,	.0800: 3, L0641: 3,	.0768: 3, L0766: 3,	'n	0789: 3, S0126: 3,
国	김	급	L0	A	<u> </u>	<u>1</u>	<u> </u>	<u>김</u>	Ħ	<u>은</u>	ដ	S3	Ħ	Ħ	<u>1</u>	Ħ	五	ਸ਼	80	김	ភ្ន	<u>8</u>	Ħ	豆豆	田	욥	<u> </u>	밁	ន
	•	-	*											<i>3</i>				.••											•
				1196			•																						
			-	47 - 2488	*		1																						
				296																						•			
				1167275															<u>. </u>										
				HBCAT08 1167275		•					•					,													
				286											· · ·			•					·· ···				•		

		-										_										-								
				•		٠.																		·						
<u> </u>								٠																<u>-</u>						
												,																		
														•																
														•																
												_		_																
સ્	e,	۷,	2,	Ų	ج,	4	ج ر	6	7	ζ,	ત્	رح (, حر	ζ,	, ,	1,	1,	1,	1,	1,	1,	1,	۲,	1,	1,	Ļ	Ţ,	1,	Ļ,	,
S0037: 3, S0028: 3,	11:	H0624: 2, S0040: 2,	H0295: 2, S0045:	H0645: 2, H0370:	H0427: 2, H0599:	H0544: 2, H0546: 2,	S0250: 2,	H0038: 2,	H0623: 2, L0564: 2,	S0210: 2, L0771: 2,	.0662: 2, L0767: 2,	90	2, H0555: 2,	L0744: 2,	L0592: 2	.0593: 2, H0171:	1, H0661:	1, H0437:	1, H0369:	1, H0485:	H0486: 1, T0039:	,0021: 1, H0097:	H0309: 1, H0545:	H0081:	H0620: 1, H0023:	H0154:	H0015:	H0083: 1, H0266:	H0188: 1, H0687:	H0288: 1, H0039:
800	.0740: 3, S0011:	S00	S00	HO	HOH	HO	S02	HOH	100	107	100	2, L0606:	H05	103	105	H0]	HO	70H	H03	HOH	To	HOH	HOH	HO	HO	HO	HOH	H0	Ĕ	ĎΗ
7:3,	. 3,	4.2	5:2,	5:2,	7:2,	.4. .2.	4.2	2,	3:2,	.2,	.2,			[.2]		.2,	3 : 1,): 1,		0:1,	6: 1,		9:1,	9: 1,	0: 1,	7:1,	4: 1,	3: 1,	. 1.	
0037	074(062	029	064	042	054	H0594: 2,	H0428: 2,	062	021(7990	L0776:	0783:	0741:	.0605: 2,]	0592	I 0049:	S0420:	S6022:	H0550:	048	002	030	H0009: 1	062	H0057: 1	H0014:	800	018	028
জ	크	耳	耳	H	耳	工	耳	耳	耳	Š	<u> </u>	그	Ä	그	ਪੁ	<u> </u>	<u> </u>	<u> </u>	ফ	王	耳		프	王	三	耳	프	프	王	I.
	,																													,
																														ļ
						•																								
												•																		
																									•				•	
		_									_			<u>. </u>		1						-								·
																•							•							
									T.							•											<u>.</u>			
																														•
																											-			
																							3		- 50					
									·							<u>. </u>		<u>.</u>		_										
					•																									
\vdash																														
					شد								-																	

H0644: 1, L0483: 1, H0644: 1, H0617: 1, H0673: 1, H0591: 1, H0087: 1, H0268: 1, H0269: 1, H0412: 1, L0769: 1, L0373: 1, L0764: 1, L0373: 1, L0764: 1, L0373: 1, L0764: 1, L0373: 1, L0649: 1, L0377: 1, L0649: 1, L0809: 1, L0658: 1, L0809: 1, L0658: 1, L0664: 1, L0558: 1, L0664: 1, H0670: 1, H0672: 1, S0380: 1, S0152: 1, H0704: 1, S3012: 1, S0206: 1, L0786: 1, L0589: 1, L0603: 1, H0665: 1, R0595: 1, H0665: 1, R0595: 1, H0665: 1, R0595: 1,	1.	AR061: 4, AR089: 1 H0050: 1, L0748: 1,
	Arg-19 to His-25.	Asp-39 to Thr-12,
	1733	1197
-	3 - 347	1 - 582
	833	297
	920940	1048855
		HHFBUS3
		287

												·							- 5	`	-							-
				•						<u> </u>									·				0	-			 ,	
· 		18														·				1	<u>-</u>					_		
L0439: 1 and H0506: 1.		AR061: 10, AR089: 3	L0803: 24, S0358: 13,	S0360: 7, L0774: 6,	L0769: 5, L0794: 5,	L0775: 5, L0777: 5,	H0510: 4, L0439: 4,	L0747: 4, L0731: 4,	L0757: 4, L0601: 4,	S0026: 4, H0556: 3,	H0509: 3, L0662: 3,	L0805: 3, L0776: 3,	L0581: 3, L0608: 3,	H0624: 2, T0002: 2,	S0218: 2, S0354: 2,	S0007: 2, H0333: 2,	H0574: 2, H0599: 2,	L0471: 2, H0373: 2,	H0188: 2, H0644: 2,	H0040: 2, L0761: 2,	L0363: 2, L0766: 2,		L0783: 2, L0789: 2,	H0521: 2, S0028: 2,	L0744: 2, L0748: 2,	L0745: 2, L0749: 2,	L0588: 2, L0362: 2,	T0049: 1, H0657: 1,
Ser-138 to Ser-144.	Ala-1 to Thr-17, Ser-106 to Ser-112.	Val-1 to Gly-10,	Arg-24 to Asp-36,	Leu-225 to Trp-231,	Val-249 to Met-258,	Glu-262 to Thr-269,	Val-279 to Gly-284,	Asp-307 to Asn-313,	Arg-411 to Lys-416.										-						*			
	1734	1198																	•									
	1901 - 96	327 - 1640									ē								•	· -			-	0		•		
	834	298						•								•		-										,
	837647	942505																•	-	*								
		HTTD045					0							-								•						
		288						-																	-			

WO 01/55301 PCT/US01/01239

	,				,									•	<u>-</u>									,				Υ.	
	_		-										<u> </u>							<u> </u>								·	_
								_																					
638: 1,	637: 1,	441: 1,	586: 1,	013: 1,	575: 1,	H0581: 1,	L0033: 1,	L0040: 1,	362: 1,	, H0622: 1,	S0366: 1,	, Н0163: 1,	, H0551: 1,	059: 1,	S0142: 1,	764: 1,	768: 1,	304: 1,	L0527: 1,	565: 1,	547: 1,	126: 1,	330: 1,	134: 1,	754: 1,	755: 1,	707: 1,	542: 1,	and H0008: 1.
H0341: 1, H0638:	S0444: 1, H0637:	HO208: 1, HO441	H0431: 1, H0586:	L0623: 1, H0013:	S0280: 1, H0575:	T0082: 1, H0	30049: 1, LO	H0596: 1, LO	H0231: 1, S0	H0355: 1, H0	70023: 1, SO:	H0135: 1, H0	H0591: 1, H0	r0067: 1, H0059:	.0564: 1, SO	Ĵ	C0773: 1, LO	C0389: 1, LO	-	.0809: 1, LO	H0144: 1, H0547:	H0519: 1, S0126:	H0672: 1, S0330:		S0037: 1, LO	L0752: 1, L0755:	S0031: 1, H0707:	H0667: 1, H0542: 1	H0543: 1 and
	<u>\</u>	<u> </u>	프	H	S	L	S	프.	프	프	Ⴞ	Ę.	프	L	ᆸ	S	<u></u>	بر	권	<u>-1</u>	四	耳	프	<u>.</u>	S	ᆸ	Š	耳	田田
					,																								
-		-					· —-				·	<u> </u>			:														
				٠.						<u></u>					<u></u>													<u> </u>	
															•														
	•			*			-	,			-						•			-	-	*				-	_		
									*								-												
																					•		-		•				
									- ;-			-																	

	 -			×					<u>·</u>				,						0		<u>. </u>	,		
		-														. —	·						,	`
										•														
AR061: 10, AR089: 5 H0254: 1, H0255: 1, H0393: 1, H0333: 1, H0486: 1, N0009: 1, H0618: 1, H0622: 1 and H0625: 1.						AR089: 1, AR061: 0	H0521: 4, L0766: 3,	L0768: 2, S0152: 2,	S0028: 2, S0308: 2,	L0593: 2, S0212: 1,	S0282: 1, H0662: 1,	H0305: 1, S0358: 1,	H0676: 1, H0580: 1,	S0046: 1, H0586: 1,	H0492: 1, H0013: 1,	H0263: 1, H0046: 1,	H0355: 1, H0416: 1,	S0003: 1, H0591: 1,	H0379: 1, T0042: 1,	L0774: 1, L0784: 1,	L0776: 1, L0789: 1,	L0664: 1, H0701: 1,	H0520: 1, H0547: 1,	Н0689: 1, Н0690: 1,
Pro-21 to Asp-26, Asp-74 to Ser-83, Glu-104 to Asn-110, Gln-161 to Cys-167.	Pro-21 to Asp-26,	Asp-74 to Ser-83,	Glu-104 to Asn-110,	Gln-161 to Cys-167,	Pro-189 to Pro-195.	Met-4 to Lys-12,	Gln-52 to Pro-72,	Cys-80 to Gln-92,	Thr-100 to Pro-105,	Thr-149 to Asn-158,	Leu-161 to Lys-172.										•			
1199	1735					1200																•		
1 - 570	1 - 828			,		147 - 662													-					
299	835	-				300																		
1104236	958035					1151371		-			-			13			<u> </u>				÷			
HTPII72						H6BSE22			•										٠			-		
289						290																		

																		-				<u>.</u>						
,															*						•							
						<u></u>					-				_								<u> </u>			<u>. </u>		
																											·.	
L0749: 1, S0260: 1, H0668: 1 and H0665: 1.		•			7					-					AR089: 2, AR061: 0	L0794: 5, S0040: 4,	H0052: 4, T0010: 4,	H0560: 4, S0420: 3,	L0455: 3, H0656: 2,	S0212: 2, H0619: 2,	H0497: 2, H0012: 2,	H0429: 2, L0766: 2,	H0520: 2, L0439: 2,	H0665: 2, H0556: 1,	H0650: 1, S0418: 1,	H0580: 1, H0550: 1,	H0370: 1, H0392: 1,	H0333: 1, H0013: 1,
	Met-4 to Lys-12,	Gln-52 to Pro-72,	Cys-80 to Gln-92,	Thr-100 to Pro-105,	Thr-149 to Asn-158,	Leu-161 to Asn-181,	Ala-183 to Ser-191,	Lys-295 to Leu-305,	Glu-316 to Ser-322,	Gly-330 to Met-353,	Asp-393 to Tyr-426,	Ser-435 to Ala-449,	Lys-455 to Asn-463,	Leu-466 to Tyr-477.	Ser-6 to Glu-13,	Asp-35 to Leu-41,	Ala-54 to Lys-62,	Tyr-121 to Asp-126,	Lys-132 to Ala-138,	Phe-148 to Glu-157,	His-163 to Thr-171,	Ser-209 to Ser-220,	Phe-234 to His-242,	Tyr-261 to Ala-266,	Arg-279 to Cys-296,	Arg-370 to Glu-376,	Ser-391 to Gln-398,	Lys-420 to Ile-425,
	1736							•							1201													
u.	147 - 1577														3 - 1586					,		-						
	836			•			*.								301		.•			•								
	969019							-							1220621													
				٠											HDPAE43								,					
															291													

H0635: 1, H0505: 1, H0318: 1, H0581: 1, H0050: 1, H0373: 1, S0256: 1, S0022: 1, H0553: 1, H0124: 1, L0370: 1, H0561: 1, H0593: 1, S0126: 1, H0435: 1, H0518: 1, H0521: 1, H0626: 1, L0748: 1, L0591: 1, H0542: 1, S0424: 1 and	×	AR089: 6, AR061: 2 H0457: 3, L0438: 3, L0748: 3, S0214: 2, H0038: 2, L0766: 2, L0731: 2, S0242: 2, H0677: 2, S0134: 1, S0346: 1, H0266: 1, H0644: 1, H0488: 1, S0210: 1, H0529: 1, L0800: 1, L0794: 1, H0521: 1, S3012: 1, L0439: 1, L0749: 1, L0750: 1 and H0423: 1.	
Ser-444 to Tyr-466, Gln-489 to Cys-497.	Tyr-21 to Asp-26, Lys-32 to Ala-38, Phe-48 to Glu-57, His-63 to Thr-71.	Glu-1 to Gly-10, Arg-22 to Lys-27, Pro-99 to Asn-116, Lys-122 to Thr-132, Thr-150 to Asn-159, Ser-187 to Tyr-192, Leu-238 to Cys-252, Glu-272 to Tyr-277, Ile-283 to Met-292, Asp-321 to Ser-328, Lys-365 to Pro-378, Gly-386 to Gln-391.	Asp-10 to Lys-18,
	1737	1202	1738
	2 - 472	1	13 - 357
	837	302	838
,	864998	1193042	810401
		HDPFM16	
		292	

									•						.										
		· ·				-		-					2									-			
	AR061: 97, AR089: 57	H0542: 2, H0265: 1,	30444: 1 and LO4/1: 1.		AR061: 2, AR089: 1	S0412: 27, L0756: 3,	H0644: 2, L0745: 2,	H0574: 1, H0032: 1,	L0598: 1, L0667: 1,	L0766: 1, L0653: 1,	L0749: 1, L0779: 1,	L0759: 1 and S0026: 1.	٠	AR061: 120, AR089:	64	H0341: 1, H0561: 1,	L0790: 1 and L0777: 1.		AR089: 120, AR061:	12	S0114: 2, H0422: 2 and	L0748: 1.	•	AR089: 12, AR061: 5	L0748: 14, H0457: 8, L0731: 5, L0770: 4,
Ser-26 to Ser-34, Ser-43 to Lys-50.	Ala-8 to Ser-23,	Ser-08 to Cili-81.	A12-8 to Ser-73	Ser-68 to Gln-81.	His-32 to His-38.	-			•	:					Leu-114 to Phe-121,	Gln-145 to Lys-156.			Pro-1 to Ser-8,	Ser-10 to Ile-31,	Ser-39 to Asp-48.				Thr-38 to Lys-44.
	1203		1730	6611	1204						•		1740	1205				1741	1206	•			1742	1207	
	81 - 548		81 - 551	,	747 - 1037	-							80 - 184	105 - 572		•		105 - 443	138 - 491		-		3 - 164	225 - 1898	
	303		830	60	304								840	305			•	841	306				842	307	
	1151478		915568	212206	1161174								933901	1150834			-	705880	1124600				866951	1196787	
	HFPCN10				HLQF035									HIMWIU94		•			HSATQ28					HTPIL46	,
	293				294									295					296					297	

							•		•										•				•				
				٠																						•	
							·										ó	-		<u> </u>			-			· .	_
							•																				
												•															
•	•														•												
		<u> </u>									•													_		ים:	
4° W, t	بن بن ا	ທ໌ ′	ຳດຳ	์ ๙์	ą,	۲,	7,	Τ,		ı —î		-	Ť	_ f	,	Ţ,	<u>,,</u>	Ţ,	۲,	<u>, </u>	٦,	Τ,	T,	1,	ئـــ	1 and	
H0543: 4, H0486: 3	10591: 3, H0456: 3, L0777: 3, S0192: 3,	H0542: 3, H0422: S0046: 2, S0002: 3	L0775: 2	39:	94:	42:	34:	.59:	10:	H0635:	H0050:	587:	:22:	32:	264:	H0641:	L0761:	62:	L0803:	L0774:	L0659:	L0790:	H0547:	L0757:	H0445: 1, S0308:	, S0011:	
	SO1	Ž Š	107		, L0594:	1, S0342:	1, S0134:	1, H0459:	, H0610:	ЭH	ЭH	1, H0687:	l, H0622:	H0032:	, H0264:	HO	I S	L0662:	L08	107	106	107	HO	107	S03	200	
 1, 4, (ຕົ ເ	, c <u>i</u>	` ~î`): 1,	 	- :	<u>-</u>		Ţ	` — ••	Ψ,	₩	_): 1,	7:1,	Ţ,	ij	_	j	: <u>;</u>	. I.		. 1,	1,	-
H0543: 4, H0486: 3, H0563: 4, H0486: 3	1,45C)542 046	.0667: 2	L0655: 2	L0749:	H0170:	S0114:	S0001:	S0222:	H0013:	H0575:	H0271:	S0214 :	L0483:	H0038:	H0560:	H0647:	L0771:	T0766:	L0650:	L0805:	C0789:	H0699:	S0152: 1	44.	L0601:	50000
	ξij.	田区	<u> </u>	걸	걸	Ĭ	<u>8</u>	$\frac{\infty}{\infty}$	$\frac{\infty}{\infty}$	耳	耳	耳	<u>8</u>	<u> </u>	Ĭ	耳	Ĭ	ם	크	ቯ	<u> </u>	걸	Ĭ	$\tilde{\mathbf{x}}$	Ĭ	Ħ	ŭ
							•	•	•																		
																					•			٠			
																						•					
		0.																									
												•															
				. •						•						4											
									•										•						•		
																									•		
		<u> </u>							_				_							<u>-</u>	<u> </u>			<u> </u>	<u> </u>		_
																	·									•	_
																				•							
					-	-																					_
																										•	
											•																
																·											
																							•				

						_				-									-	٠							_,_		
												•																<u>.</u>	
									٠			٠.	÷								,		-						
															 ;	<u></u>						. <u> </u>		-	_				
سنم.																-		•				-	•			AR089: 1, AR061: 0	S0052: 2		
Gln-4 to Cys-9,	Asp-23 to Pro-35,	Leu-54 to Ile-59,	Asn-61 to Asp-67,	Val-93 to Lys-101,	Gly-108 to Glu-136,	Ser-145 to Thr-157,	Thr-176 to Gln-186,	Thr-194 to His-200,	Lys-208 to Ser-215,	Val-261 to Phe-267,	Thr-297 to Arg-305,	Lys-320 to Arg-327,	Asn-336 to Asn-342,	Glu-356 to Glu-365,	Lys-375 to Tyr-385,	Pro-407 to Val-413,	Ser-417 to Leu-423,	Thr-459 to Glu-467,	Glu-503 to Val-508,	Leu-564 to Cys-571,	Glu-581 to Asp-590,	Pro-611 to Val-621,	Lys-625 to Gly-635,	Asp-676 to Phe-684,	Leu-709 to Cys-717.	Asn-10 to Arg-15,	Asn-22 to Leu-27,	Arg-90 to Lys-95.	Asn-9 to Arg-14,
1743														٠.				•		-				-		1208			1744
2 - 2218																		- <u>-</u> -						- % -		1 - 531			2 - 259
843										•																308			844
973570											-															1103305			663955
									•									,								HNGEN37			2-
									1																	298			

					<u>-</u> .			-				•				<u> </u>	_	·			•]
	•			•					٠,												٠	
								-														
											0											
						•																
	 9, 2,		-î o	•	30: 1.	٠			 .,			ω,		~£	•	•	•			l and		
	6, AR089: 3, AR050: 1		2, AR061: 0, AR054:		L0015: 1 and S0330: 1.				, AR089:	, AR051:	•	L0662: 3, L0653: 3,	.0648: 2, L0659: 2	435: 2	550: 1	472: 1	L0643: 1	L0803: 1	H0672: 1			
					: 1 an					(1	0	3, L(2, LO	.0666: 2, H0435:	1, H0550:	H0264: 1, S0472:		``	1, HO	1, L0779:		
	AR061: AR051: AR054:		AR050: AR089:	AR051:	0015				AR054:	AR061:	AR050:	0662	648: (:999	S0376: 1	264:	L0800:	L0649:	.0420		20200:	·
П	444	Т	44			<u> </u>		-	¥	₹	<u>₹</u>		#	<u>ន</u>	<u>8</u>	Ħ	ဌ	김	뎡	80	2	
-26.	•	36.	.18, 102,	Gln-121 to Gln-128,	Gly-208 to Gln-216, Pro-231 to Ile-238.	18,	102,	1-128.	55,	68,	-106,	Pro-122 to Gln-127,	Leu-219 to Gly-225,	-281.							5	52 , 65.
Asn-21 to Leu-26.		Gly-1 to Cys-9, Pro-12 to Pro-36.	Arg-11 to Arg-18, Gln-96 to Gln-102,	to Glr	Gly-208 to Gln-21. Pro-231 to Ile-238.	Arg-11 to Arg-18,	Gln-96 to Gln-102,	Gln-121 to Gln-128	Cys-49 to Leu-55,	Glu-62 to Glu-68,	Phe-100 to Lys-106,	o Glu	to Giy	Gly-273 to Gly-281							,	Cys-46 to Leu-52, Glu-59 to Glu-65.
1-21 to		-1 to	-11 tc	-121	-208 1-231 t	-11 to	-96 to	-121	-49 tc	-62 tc	-1001	-122 t	-219	-2731							13,	-40 tc -59 tc
Asn		P. G.	Arg	<u>유</u>	<u>유</u>	Arg	[등	Gh	Cys	ng G	Phe	Pro	Len	<u>S</u>							-	Cys Glu
	1209	1745	1210			1746			1211		,										Į,	1/4/
	-					-		_	-						<u>-</u>	<u> </u>						-
	- 547	- 215	- 957			-612			3 - 977												100	7 - 30/
	32 -	403 -	31		_	31.			3 -													7 -
	309	845	310			846			[1]							_					١	84./
	3(311						_							%
	974855	974856	1154961			947067			6168616													94/085
		9	=	• •		8		_							·						_[3	y
	D07.		AZ51						HOGDR01													
į.	HLMD077		HNKAZSI						HOG													
-	299	<u>.</u>	300				•		301												•	
	Ć.		m						3													

											,				(
		. %								*										
AR061: 14, AR054: 11, AR050: 9, AR089: 4	L0758: 2, H0059: 1, L0789: 1, L0665: 1, L0749: 1 and L0779: 1.	AR050: 3, AR061: 2, AR054: 2, AR089: 1,	H0586: 1 and L0376:			AR061: 4, AR089: 3	H0038: 7, L0738: 5,	S0002: 3, L0637: 3,	H0623: 2, L0794: 2,	L0809: 2, L0663: 2,	H0522: 2, L0779: 2,	L0777: 2, S0046: 1,	H0431: 1, T0060: 1,	H0013: 1, S0010: 1,	H0545: 1, H0050: 1,	S0023: 1, S0003: 1,	H0328: 1, H0135: 1,	H0163: 1, H0412: 1,	H0102: 1, H0100: 1,	T0042: 1, L0768: 1,
	· ·	Glu-25 to Trp-33, Trp-76 to Gln-83,	110-74 to tasp-100.	Glu-25 to Trp-33,	Trp-76 to Gln-83, Pro-94 to Asp-108.	Glu-4 to Ser-9,	Ser-58 to Arg-65.					,	- 10							
1212		1213		1748		1214							•							
852 - 265	,	3 - 743		2 - 742		1 - 714		,		,			<u> </u>				-			:
312	χ.	313		848		314		•												
957456	· · · · · · · ·	1155021	· .	947019		836514						-		•						
HUKEP18 957456		HWHGF95				HEMFC61								,						
302		303				304														

					_																								-
								*										41									3		
	· · · · ·						· ·																						
L0803: 1, L0375: 1,	L0542: 1, L0647: 1,	L0367: 1, L0791: 1,	L0664: 1, H0693: 1,	S0328: 1, S0168: 1,	S0031: 1 and H0008: 1.	AR089: 1, AR061: 0	H0457: 2		342			AR089: 1, AR061: 0	H0542: 1	AR089: 1, AR061: 0	H0542: 1	CA	AR051: 1, AR089: 0,	AR061: 0	H0624: 2, S0003: 2,	H0519: 2, L0591: 2,	H0171: 1, H0583: 1,	S0418: 1, S0046: 1,	H0619: 1, H0437: 1,		H0590: 1, H0188: 1,	H0039: 1, H0551: 1,	H0623: 1, H0529: 1,	H0520: 1, H0521: 1,	H0522: 1, L0745: 1,
				- 4		Phe-62 to Arg-67,	Gln-92 to Leu-104,	Arg-163 to Leu-171,	Ile-175 to Thr-182,	Ser-237 to Ser-244,	Ala-270 to Arg-277.	Phe-62 to Arg-67,	Gln-92 to Leu-104.	Phe-62 to Arg-67,	Gln-92 to Leu-104.							•							
						1215						1216		1217		1218							-						
						157 - 1026						9 - 395	,	25 - 462		96 - 1													
						315						316		317		318								٠.					
	-	<u> </u>			*	942596			-			878267		878217		918789													
						HEOQP44						HHEKZ12		HHELA35		HSYBQ34			*	_ 									
						305					!	306		307		308													

												·		-				_							
									•													,	•	·, **	
L0756: 1 and H0595: 1.		AR089: 14, AR061: 9 H0457: 1, H0009: 1,	L0666: 1, S0053: 1 and L0741: 1.	AR061: 1, AR089: 0	S0040: 1, S0222: 1, L0471: 1 and L0517: 1.	AR089: 1, AR061: 0	L0803: 6, H0046: 4,	L0666: 3, H0521: 3,	L0731: 3, H0331: 2,	H0574: 2, L0794: 2,	L0774: 2, L0747: 2,	H0686: 1, H0341: 1,	H0545: 1, H0375: 1,	H0687: 1, H0428: 1,	Ψí	S0036: 1, S0386: 1,	۲,	Ę,	L0364: 1, L0804: 1,	۲,	L0659: 1, L0809: 1,	L0663: 1, L0665: 1,	Ţ		L0752: 1, L0758: 1,
	Phe-62 to Arg-67, Gln-92 to Leu-104.			Ser-50 to Ser-66.		Glu-38 to His-43,	Arg-58 to Thr-68.						*			•				-					
	1749	1219		1220		1221											•	·							,
	2604 - 3473	192 - 494		1 - 243		1 - 495																			
	849	319		320		321																			
	972295	948533		948519		734057						-		- -	_		• • •	,							·
		HFCBA44		HOUBE50		HDPAS16																	-		
		309		310		311			_							-				-					

						-				•			•				•					٠					*
																					,						
H0343: 1, L0608: 1,	L0366: 1, S0192: 1, H0543: 1 and H0423: 1	AR061: 106, AR089:	H0047: 2, H0181: 2	and S0260: 1.	AR061: 2, AR089: 1	L0749: 1, L0731: 1,	L0757: 1 and H0423: 1.		AR061: 1, AR089: 1	S0045: 2, L0646: 2,	L0766: 2, L0776: 2,	L0783: 2, L0731: 2,	H0341: 1, H0663: 1,	T0039: 1, L0021: 1,	H0009: 1, T0042: 1,	L0763: 1, L0764: 1,	L0649: 1, L0775: 1,	L0661: 1, S0328: 1,	L0777: 1, L0757: 1,	L0758: 1 and H0444: 1.				AR089: 6, AR061: 4	H0266: 1, H0416: 1	and S0031: 1.	
					Asp-1 to Arg-8,	Lys-15 to Asn-20,	Thr-74 to Leu-80,	Pro-84 to Asp-90.	Thr-7 to Leu-13,	Pro-17 to Asp-23,	Ala-180 to Arg-188.							•			Thr-7 to Leu-13,	Pro-17 to Asp-23,	Ala-180 to Arg-188.	Tyr-5 to Thr-14,	His-61 to Asn-70.		Tyr-6 to Thr-13,
		1222			1223				1224	•									-		1750			1225			1751
		2 - 784			273 - 881			0	491 - 1120												372 - 1001	*		1 - 306			3 - 374
		322			323				324				į.					•			850			325			851
	<u> </u>	960332			922112				1103330		-										922115			1155464			582754
		HFLAA23			HCFMZ90		() e		HFCES27							,				1				HSDFK78			
		312			313				314															315			N.

					<u> </u>												*					
					<u> </u>															-		:
. •							٠.,	4						·.								
<u>.</u>	£ 3			· · · · · · · · · · · · · · · · · · ·				2,	 				,			t					- :	
•	AR054: 11, AR050: 3, AR051: 3, AR089: 2,		H0624: 1, H0341: 1, S0280: 1, H0271: 1		L0439: 1, S0031: 1 and S0260: 1.	· · · · · · · · · · · · · · · · · · ·		5, AR061:	S0028: 1		AR089: 4, AR061: 1	S0052: 1 and S0428:	-	AR089: 2, AR061: 0	S0358: 1, S0370: 1,	L0803: 1, S0374: 1 and	S0152: 1.		AR089: 8, AR061: 5	L0754: 3, H0553: 2,	L0731: 2, L0005: 1,	H0581: 1, H0271: 1, H0644: 1 and H0521:
His-60 to Asn-69.	Tyr-101 to Glu-108, Pro-110 to Arg-116,	Tyr-158 to Gln-164.		·		Tyr-101 to Glu-108,	Pro-110 to Arg-116, Tvr-158 to Gln-164.	His-8 to Gly-18.		His-8 to Gly-18.				Leu-59 to Gln-64.					Lys-1 to Ile-6,	Pro-28 to Glu-37,	Leu-58 to Arg-65,	Pro-95 to Glu-102, Arg-104 to Gly-111,
	1226					1752	-	1227	•	1753	1228		1754	1229				1755	1230			
	729 - 1487					186-7		31 - 993	• (983 - 21	1 - 399		45 - 290	954 - 562				1 - 318	739 - 1191			
	326		•		•	852		327		853	328		854	329	,			855	330			•
	891067					165956		1105339	:	964075	1128272		971170	1105515		-		735158	1162653			
	HSDJX58					•		HSLHV27			HNGFU12			HWLKA89					HLWBU48.			
-	316							317			318			319					320			

. 3				. -			-															_			17	
	(0										-				*			
	ď			ψ					•							,		,		•	•	•			•	
. *	* •	AR089: 1, AR061: 0	H0556: 24, H0521: 12,	H0551: 9, H0265: 8,	H0692: 8, H0543: 8,	S0418: 7, L0748: 7,	H0542: 7, H0318: 6,	H0560: 6, S3014: 6,	H0445: 6, L0665: 5,	L0747: 5, H0423: 5,	H0341: 4, H0617: 4,	L0769: 4, L0439: 4,	L0740: 4, L0750: 4,	L0595: 4, S0278: 3,	H0052: 3, H0622: 3,	H0135: 3, H0040: 3,	S0144: 3, L0768: 3,	L0766: 3, L0775: 3,	L0776: 3, H0547: 3,	S0328: 3, S0206: 3,	L0591: 3, L0608: 3,	H0422: 3, H0170: 2,	H0657: 2, H0484: 2,	S0045: 2, S0046: 2,	H0545: 2, H0050: 2,	H 0012: 2, H 0620: 2,
Glu-118 to Glu-123, Glu-125 to Ala-130, Gly-142 to Gly-151.	Ile-5 to Pro-10, Lys-36 to Thr-41.	Pro-17 to His-24,	Pro-26 to Asp-33,	Pro-66 to Lys-72,	Thr-149 to Arg-158,	Asp-172 to Glu-178,	Ala-279 to Ser-289,	Arg-306 to Arg-314,	Val-330 to Lys-336,	Asp-347 to Arg-353,	Arg-358 to Gln-363.	•			-			-		•		:				
0	1756	1231											•									•				
	2-280	496 - 1623								*										1						
	856	331																						٠.		
	721520	1204720							-													•	•			
		HWWEY71 1204720				,										,										
		321																		-						

							- 1	-												4					_					
									_		8																. •			
							-	**					•								5									
					•				×			<u>.</u>									A		,				<u>.</u>	<u>.</u>		
H0083: 2, H0284: 2,	H0087: 2, H0488: 2,	.0640: 2, L0771: 2,		L0783:	.0383: 2, L0663: 2,	L0438: 2, H0520: 2,	L0751: 2, L0731: 2,	L0757: 2, L0596: 2,	.0362: 2, T0002: 1,	H0686: 1, S0040: 1,	S0218: 1, H0583: 1,	H0656: 1, S0180: 1,	S0212: 1, H0483: 1,	H0177: 1, H0125: 1,	S0420: 1, S0356: 1,	S0376: 1, S0360: 1,	<u> </u>	÷	H0393: 1, L0717: 1,	H0586: 1, H0587: 1,	H0642: 1, H0331: 1,	Ę,	H0013: 1, H0599: 1,	T0082: 1, S0182: 1,	H0309: 1, T0110: 1,	H0327: 1, H0544: 1,	H0041: 1, S0051: 1,	•	H0252: 1, H0328: 1,	H0604: 1, H0031: 1,
HOOH	00H	106 1	L07	103	103	L04.	L07	L07	<u>1.03</u>	90H	S02	90H	S02	H01	S04.	S03,	S0408:	S0132:	H03	H05	90H	H02	H00	T00	H03	H03	H00	H02	H02	SH
							•						•								•									
	7				-								•		 ,											3	·			
					•																		,.				×			
		•										*																		
																				j										
											,	٠										•			·					
																				9										
								•																				-		

PCT/US01/01239

,	_			_	 -									· ·						<u> </u>		-								
							•		•																				•	
									•														,	,						
					7111																									
H0644: 1, H0628: 1,	H0181: 1, H0606: 1,		H0090: 1, H0616: 1,	H0264: 1, H0412: 1,	59: 1, S0038: 1,	H0100: 1, L0351: 1,	42: 1, H0494: 1,	H0561: 1, L0065: 1,	38: 1, H0509: 1,	S0150: 1, S0472: 1,	H0647: 1, S0422: 1,	02: 1, S0426: 1,	` — ``	L0772: 1, L0372: 1,	.0645: 1, L0662: 1,	.0364: 1, L0388: 1,	74: 1, L0375: 1,	.0805: 1, L0653: 1,	L0655: 1, L0657: 1,	L0559: 1, L0659: 1,	-	L0792: 1, L0666: 1,	.0664: 1, H0144: 1,	H0698: 1, H0699: 1,	H0703: 1, H0435: 1,	S0380: 1, H0522: 1,	H0696: 1, S0028: 1,	.0744: 1, L0754: 1,	L0779: 1, L0758: 1,	.0759: 1. L0593: 1.
)0H	H01	S0364:	HOO	H02(H0059:	H01	T007	H0561: 1	S0438:	S015	90H	S0002:	L05(L07	790T	L036	L0774:	108 108	F06	L05	L052	L079	106 106	90H	H07	S03	90H	L074	L077	1,07
							-						•									_								
								•							-															
	ı								·						*															
,			,	•							•	٠	•										•							
				-		,	.	-																						
																	-	_						•		-				
														-			-			-										,
																							-							<u> </u>

					, •	,									- -	
					-		•		<u></u>		<u></u>					
L0601: 1, S0011: 1, H0668: 1, S0192: 1, S0276: 1 and S0424: 1.		AR061: 2, AR089: 1 S0053: 2, S0045: 1, H0619: 1, H0318: 1 and H0050: 1		AR061: 1, AR089: 0	S0053: 2, S0045: 1, H0619: 1, H0318: 1 and H0050: 1.		AR061: 5, AR089: 2	H0682: 2, H0521: 2,	H0295: 1, L0005: 1,	H0645: 1, H0549: 1,	T0060: 1, H0327: 1,	H0545: 1, H0050: 1, H0012: 1 H0620: 1	H0510: 1, H0687: 1,	H0617: 1, H0059: 1,	H0509: 1, H0641: 1,	S0002: 1, L0646: 1, L0374: 1, L0794: 1,
	Ala-46 to Pro-68, Gln-75 to Gly-84, Leu-106 to Gly-121, Pro-208 to Lys-214.	Phe-3 to Cys-8, Ser-64 to Gln-69.		Phe-3 to Cys-8,	Ser-64 to Gln-69.	His-27 to Thr-32.	Glu-140 to Trp-147,			-	•				3	
	1757	1232	1758	1233		1759	1234	•								
Ÿ	71 - 775	260 - 913	1 - 267	643 - 2	-	1 - 195	119 - 1138			v			·			
	857	332	858	333		859	334		•		-					
	970546	1151161	584855	1161293		683284	1151497								-	
		HHFGD45	,	HNHEB44			HIMACX92									
		322		323			324									

		·			•		
L0804: 1, L0775: 1, L0656: 1, L0809: 1, L0790: 1, L0664: 1, S0052: 1, H0520: 1, L0749: 1, H0653: 1 and S0194: 1.	AR089: 0, AR061: 0 L0794: 4, H0435: 2, H0632: 1, H0013: 1, H0030: 1, S0150: 1, L0649: 1, H0547: 1, H0519: 1, H0689: 1	L0759: 1 and H0677: 1.	AR089: 8, AR061: 4 H0305: 4, H0419: 1 and S0045: 1.		AR061: 1, AR089: 0 H0305: 4, H0419: 1 and S0045: 1.	AR061: 3, AR089: 1 S0028: 5, S0126: 2, S0001: 1, S0282: 1, S0045: 1, S0049: 1, S0050: 1, H0271: 1, H0388: 1, S0390: 1,	AR089: 1, AR061: 0
	Pro-1 to Gly-18, Arg-29 to Pro-42, Glu-80 to Arg-86, Gly-239 to Pro-247, Pro-410 to Thr-419.		·		Glu-52 to Gly-57, Cys-69 to Asp-83, Lys-88 to Met-93.	Arg-10 to Lys-16.	Met-12 to Gly-17.
0,000	1235	1761	1236	1762	1237	1238	1239
071	1 - 1263	2 - 682	486 - 94	3 - 233	49 - 333	365 - 679	2 - 496
	335	861	336	862	337	338	339
	1193070	867327	1105677	657402	920486	916944	1105530
	HNTBW57		HBSDC13		HCWBX21	HFRBW72	HSLJX23
	325		326		327	328	329

	/										•						10			(
*			<u>*.,</u>								•			-						** ,								· · ·	_
S0390: 1 and S0031: 1. Sometimes of the state of the s		AR089: 1, AR061: 0	H0150: 1, 50390: 1 and	20027: 1.	•		AR061: 4, AR089: 2	L0748: 18, L0749: 8,	L0755: 7, H0686: 4,	S0360: 3, H0519: 3,	H0659: 3, L0747: 3,	L0758: 3, H0341: 2,	H0622: 2, H0040: 2,	H0616: 2, L0772: 2,	L0375: 2, L0754: 2,	L0779: 2, H0542: 2,	H0294: 1, H0657: 1,	H0656: 1, S0116: 1,	H0663: 1, H0638: 1,	S0376: 1, H0393: 1,	H0083: 1, H0030: 1,	L0055: 1, H0068: 1,	H0591: 1, H0038: 1,	H0412: 1, H0100: 1,		L0763: 1, L0771: 1,	L0767: 1, L0768: 1,	1	L0633: 1, L0783: 1,
		Glu-29 to Asp-35,	Giu-113 to Leu-120,	Ala-123 to Gly-133,	Ala-138 to Lys-143.	Arg-21 to Glu-27.	Arg-13 to Arg-19,	Asp-37 to Asp-43,	Glu-127 to Asp-132,	Asn-152 to Glu-171,	Ala-179 to Ala-193.															(2)		•	
	1763	1240		٠.		1764	1241																:						
	2 - 256	1 - 438				2 - 358	107 - 727									*		_							,				
	863	340				864	341	•									. •							. -					
	837470	1105297				787575	1102604																	,					
		HSLJX90					HAUAI67						•								-				•				
		330			_		331									-			3		•					-,			

-		· .										
			,		12	·				-		
L0665: 1, H0144: 1, H0682: 1, S0378: 1, H0627: 1, L0752: 1, L0731: 1, S0026: 1, H0665: 1, S0242: 1 and H0543: 1.	AR089: 1, AR061: 1 L0777: 13, L0751: 10, L0769: 7, L0766: 6,	L0758: 6, H0618: 4, H0617: 4, L0771: 4, L0776: 4, L0757: 4,	L0759: 4, H0494: 3, L0761: 3, H0521: 3,	L0754: 3, H0265: 2, H0650: 2, S0045: 2,	H0427: 2, H0253: 2, H0318: 2, H0150: 2,	L0794: 2, L0805: 2,	L0633: 2, L0743: 2, L0439: 2, L0749: 2,	L0750: 2, L0752: 2, H0445: 2, H0556: 1,	S0342: 1, S0218: 1,	L0785: 1, H0484: 1,	; ;	H0549: 1, H0587: 1, H0333: 1, H0486: 1,
	Gly-22 to Phe-27, Tyr-36 to Ala-48, Glu-51 to Pro-79,	Pro-102 to His-113.				•						
1765	1242						٠.					
230 - 652	20 - 433				-		,					
865	342											
929241	953718											
	HDPTA89						 					,
	332									,		

							*					-		•													-		
	_				<u></u>		•										•						*			,			
S0280: 1, H0599: 1,	S0346: 1, H0194: 1,	T0115: 1, H0597: 1,	H0231: 1, H0046: 1,	H0083: 1, H0266: 1,	H0188: 1, H0688: 1,	H0424: 1, H0213: 1,	H0181: 1, S0364: 1,	H0616: 1, H0087: 1,	H0551: 1, H0412: 1,	H0623: 1, H0100: 1,	T0041: 1, S0150: 1,	H0695: 1, L0796: 1,	L0643: 1, L0662: 1,	L0803: 1, L0775: 1,	L0809: 1, L0789: 1,	L0663: 1, L0664: 1,	H0691: 1, S0126: 1,	H0682: 1, S0152: 1,	H0555: 1, H0627: 1,	S0027: 1, L0779: 1,	L0780: 1, L0753: 1,	L0596: 1, H0668: 1,	H0667: 1 and H0543: 1.	AR089: 9, AR061: 8	T0042: 2, H0556: 1,	H0486: 1, L0586: 1,	H0083: 1, H0641: 1,	S0142: 1, H0529: 1 and	H0435: 1.
	ε											·					3							Lys-50 to Gly-56,	Pro-114 to Gly-122,	Glu-129 to Tyr-134,	Ala-174 to Leu-179,	Arg-210 to Tyr-222.	•
												× <u>-</u>		,								0		1243					
		•													•									3 - 686					
									,		-													343					
					•.		,												·					927125		,			
									-				*										-	HMCBN45 927125			-0		
																•								333					

				*																, · ·	•			•					
L		<u> </u>		·						<u> </u>															 	-			
AR089: 1, AR061: 0	L0766: 50, L0754: 12,	L0740: 11, S0358: 9,	L0803: 8, H0575: 7,	L0731: 7, L0747: 6,	L0761: 5, L0662: 5,	L0805: 5, L0744: 5,	L0748: 5, L0779: 5,	L0794: 4, L0749: 4,	L0750: 4, L0752: 4,	L0757: 4, L0362: 4,	L0471: 3, S0210: 3,	L0806: 3, H0144: 3,	S0126: 3, S0328: 3,	L0743: 3, L0777: 3,	L0759: 3, H0423: 3,	S0376: 2, H0013: 2,	S0474: 2, H0581: 2,	H0179: 2, H0628: 2,	H0038: 2, H0264: 2,	H0623: 2, H0641: 2,	S0142: 2, S0426: 2,	L0800: 2, L0771: 2,	L0768: 2, L0649: 2,	L0774: 2, L0655: 2,	S0374: 2, L0438: 2,	H0436: 2, L0745: 2,	L0746: 2, L0756: 2,	L0753: 2, L0755: 2,	S0026: 2, H0170: 1,
Ala-7 to His-20,	Arg-38 to Gly-48,	His-89 to Trp-98,	Thr-125 to Arg-130,	Ala-133 to Cys-140,	Ser-157 to Leu-171,	Asp-201 to Ile-206,	Gln-231 to Lys-238,	Thr-240 to Thr-259,	Gly-266 to Gly-277.	•								•				200							
1244				•				:																			•		
352 - 1281														•											-	+			·
344			*				·.																				•		
1223495					······································																	-					•		
HTTJY18 1223495									•										•				•						
334																													_

							,					,													•				
-																													·
									ě		٠				٠.	•									ě				
								-				•								1									
[: <u>1</u> ,		2: 1,	: 1,	0: 1,	i: 1,	3: 1,	5: 1,	4: 1,	: 1 :	2: 1,	6: 1,	2: 1,	2: 1,): 1,	3: 1,): 1,	: 1,	. 1,	2: 1,	2: 1,	5: 1,	5: 1,	0: 1,	6: 1,	3: 1,	3: 1,	0: 1,) : 1,	-1 -1 -1 -1
, H0341	, H0664:	, S0442	, S6022	I, H037	1, L0021:	(, H000	, H0036	I, H0274:	, L0105:	I, H0052:	l, H0596:	l, H0572:	l, H0242:	1, S0050:	l, H0083:	l, S0250:	, T0023	, T0006:	l, L0142:	, H0032:	l, L0455:	, H0135:	l, H0040:	l, H0616:	, H0488:	I, H0413:	1, H0560:	I, H0529:	1, L0762: 1 1, L0638: 1
S0114: 1, H0341	S0001: 1	H0638: 1, S0442:	S0046: 1, S6022:	H0611: 1, H0370:	H0642: 1	H0599: 1, H0003:	.0022: 1, H0036:	H0004: 1	S0010: 1	H0421: 1	H0251: 1	H0046: 1	H0050: 1	H0012: 1	H0014: 1	H0375: 1	S0003: 1	L0483: 1	H0031:1	.0055: 1	H0674: 1	\$0036: 1	H0000: 1	H0634: 1	roo67: 1	H0433: 1	H0056: 1	.0598: 1	L0369: 1 L0770: 1
S		نظر	S	<u> </u>	<u></u>	<u> </u>	<u> </u>	<u> </u>	S	<u> </u>	#	<u> </u>	<u>, 14</u>		<u>, 144</u>	74	S	Ħ	<u> </u>	<u> </u>	<u>14</u>	<u> </u>	<u>14</u>	<u> Н</u>	<u> </u>	<u>-14</u>	بدر	<u>, 1-1</u>	
	•																								•				
		<u> </u>																				 -					,		
			_									,											_					-11	
_	,													<u> </u>			•	0				•							•
-						•	•					-													•				
														*			_	(_					
																				•									
											×																		<u> </u>
																				-,-									

*	*			137600, 147680, 189800	217030, 248510, 600919, 601542	
				4q25-q27 13 14 18	6 6 2 2 1 6 6 6 6 6 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	H0543: 1, S0458: 1 and S0384: 1.	AR089: 0, AR061: 0 S0278: 1		AR089: 1, AR061: 1 4q. H0309: 2		AR061: 11, AR089: 6
	ES Asp-1 to Pro-17.	~ ~ ~	Tyr-30 to Ser-35, Arg-94 to Gly-100.			Asn-7 to Thr-18,
	1766	1245	1767	1246	. :	1247
	238 - 1263	68 - 526	2 - 493	3 - 122		3-218
	998	345	298	346		347
	950989	1157337	950168	558195		708888
		HIMAJI.09	·	HSVCH37		HTOCG37
		335		336		337

																				_				*		(¥)		_	
		<i>*************************************</i>	· ·																							5	•		
L0777: 4, L0766: 3,	L0776: 3, L0439: 3,	H0031: 2, L0809: 2,	H0694: 2, L0591: 2,	S6024: 1, H0656: 1,	H0369: 1, H0051: 1,	T0067: 1, H0272: 1,	L0769: 1, L0805: 1,	•	H0684: 1, L0779: 1,	S0031: 1, L0584: 1 and	L0366: 1.	AR089: 5, AR061: 1	L0748: 5, L0438: 3,	L0747: 3, L0731: 3,	L0005: 2, S0360: 2,	L0769: 2, L0794: 2,	L0766: 2, L0803: 2,	L0655: 2, L0756: 2,	L0758: 2, S0356: 1,	L0717: 1, H0033: 1,	H0617: 1, H0413: 1,	S0038: 1, S0422: 1,	S0426: 1, L0639: 1,	L0646: 1, L0662: 1,	L0378: 1, L0636: 1,	L0647: 1, L0367: 1,	L0789: 1, L0666: 1,	H0436: 1, L0779: 1,	L0777: 1, L0752: 1,
Glu-34 to Ser-39,	His-59 to Asn-64.								•			His-8 to Arg-13,	Ser-23 to Lys-30.				•					•							
		:		•							-	1248																	
					···				-			243 - 656		*						3			·				_		
											•	348					-	,											
-								•				771624		1 2											÷			٠	
*												HBXAW47 771624																	
											·	338					-			**						-			

	107777, 123940,	139350,	139350,	148040,	148041,	148043,	148070,	231550,	600194,	600231,	600536,	600808,	600956,	601284,	601769,	601769,	601928,	602116, 602153			107280,	107280,	107400,	107400,
	12q13			·		٠			•												14q32.1			
L0753: 1, L0608: 1 and L0601: 1.	AR089: 2, AR061: 1 L0741: 10, H0052: 6,	S0036: 3, L0439: 3,	S0388: 2, L0770: 2,	L0438: 2, S0300: 1,	•	L0021: 1, S0010: 1,	S0049: 1, H0327: 1,	H0150: 1, H0009: 1,	H0569: 1, H0051: 1,	S0051: 1, T0010: 1,	L0456: 1, S0038: 1,	H0100: 1, L0370: 1,	L0517: 1, L0742: 1,	L0745: 1, L0592: 1 and	L0366: 1.				AR061: 0, AR089: 0	S0036: 1, H0521: 1,	AR089: 1, AR061: 0	H0144: 2, S0038: 1 and	L0439: 1.	
	Gly-19 to Cys-25, Pro-56 to Phe-68,	Gly-94 to Pro-99,	Lys-113 to Leu-119,	Pro-126 to Gln-131,	Lys-138 to Leu-145.		•			-	•								Arg-1 to Gly-7,	Pro-25 to His-34,	Asn-1 to Arg-10,	Pro-105 to Val-114,	Gin-130 to Glu-140.	
	1249																		1250		1251			
ı	1111 - 1830									,								-	3 - 731		2 - 535			
	349		-				•												350		351			
	108606						•							-					926924		932780			
	HBXAW27																		HSLJE54		HBXBG65			
	339																		340		341			

186960,	245200, 601841								,		-							,										
						•				0												-		_ 7				
		AR089: 17, AR061: 8	L0748: 3, H0650: 1,	S0007: 1, H0013: 1,	H0618: 1, H0051: 1,	S0051: 1, H0553: 1,	H0268: 1 and S0031: 1.	AR061: 1, AR089: 1	H0620: 3 and H0435:	-	AR089: 8, AR061: 5	S0040: 1, H0083: 1 and	H0520: 1.	AR061: 0, AR089: 0	H0052: 2, L0439: 2,	S0418: 1, H0619: 1,	S0280: 1 and L0438: 1.				AR061: 5, AR089: 2	S0010: 4, S0222: 3,	H0455: 2, L0803: 2,	L0439: 2, L0745: 2,	S0282: 1, S0400: 1,	H0456: 1, H0441: 1,	S0346: 1, H0509: 1,	L0769: 1, L0438: 1,
											Gln-34 to Glu-42.			Pro-14 to Gly-32,	Pro-73 to Glu-83,	Phe-92 to Ser-100,	Glu-141 to Asp-148,	Thr-159 to Gln-166,	Asp-198 to Pro-204,	Thr-242 to Val-248.	Glu-62 to Tyr-67,	Ser-129 to Asp-135.				-		
		1252						1253			1254			1255							1256			•				
		703 - 1128						90 - 392			1 - 264			172 - 1047							88 - 540			_	٠			
		352						353			354			355							356							
		933609						953161			954871			957942							964824				•			
		HE8CG83						HOGCW55			HNTND64			HHAWC08		•					HFPEN04							
	-	342						343			344			345							346							

			,		
	116806, 120120, 120120, 120120, 120436, 120436, 138320,	108408, 182280, 190182, 190182, 227646, 261510, 600163,		192340, 234200	
	3p22-p21.3			20p13	
L0756: 1 and S0106: 1. AR089: 1, AR061: 1 S0045: 1, H0623: 1 and S3020: 1.	AR061: 4, AR089: 3 L0789: 2, H0069: 1, H0052: 1, H0266: 1, H0040: 1, S0210: 1 and H0519: 1.		AR089: 1, AR061: 0 S0126: 4, S0028: 2 and 30031: 2.	AR089: 2, AR061: 2 H0518: 1 and L0362: 1.	AR089: 39, AR061: 13 L0745: 8, L0740: 6, L0747: 5, L0794: 4,
L0756: J AR089: S0045: S3020: J	AR061: L0789: 2 H0052: 1, H0040: 1,	· · · · · · · · · · · · · · · · · · ·	AR089: S0126: 4 S0031: 2.	AR08 H051 1.	AR08 L074 L0747
Cys-1 to Asp-10, Thr-16 to Asn-22.	Asn-21 to Asn-31.		Phe-44 to Arg-49.	Val-99 to Gly-106.	Asp-22 to Gly-34, Lys-37 to Glu-42.
1257	1259	3-	1260	1261	1262
58 - 399	1 - 360		478 - 2	73 - 450	404 - 201
357	359		360	361	362
496523	558751		572920	621705	715301
HTZMB51	HTTDP32		HSLEP27	HMTAL73	нмнво53
347	349		350	351	352

								•				•		,													10			
			•			-																								
																													-	
																			•		٠									
3,	ຕ໌ເ	3,	7,	2,	. ,	7,	2,	7,	2,	1,	1,	, , ,		, , ,	Ť	1,	1,	1,	1,	1,	1,	1,	1,	1,	1,	1,	1,	1,	1,	1,
J0666: 4, S0360: 3,	H0150: 3, H0031: 3,	H0617: 3, L0769: 3,	:H0662: 2, S0182: 2,	H0286: 2, H0135: 2,	.0770: 2, L0662: 2,	H0547: 2,	L0752: 2,	L0731: 2,	L0593:	H0556: 1, S0342:	, S0212:	S0418:	, S0358:	1, H0587:	H0253:	H0052:	1, H0046:	H0408:	H0375:	H0099: 1, H0247:	H0628:	1, H0509:	S0210:	L0772:	L0643:	L0364:	L0653:	L0636:	L0809:	1, L0438:
566: 4, 1	150: 3,	617:3,	662: 2,	286: 2,	770: 2, 1	0803: 2, 1	0743: 2,]	,0753: 2,]	L0758: 2, 1	556: 1,	H0341: 1,	<u> </u>	_		H0575: 1,	H0318: 1,	H0545: 1,	•	H0510: 1,	099: 1,	H0687: 1,	H0551: 1,	S0344: 1, S	.0761: 1,]		•	.0774: 1,]	0655: 1, 1		H0144: 1,
POT T	Ħ.	Š H	Ř	HO	100	<u>~~</u>	101	<u>10</u>	<u>Lo</u>	HO	Ë	Ä	70S	HO	H H	H	ÖH H	ŎH.	HO	HO	Ŭ) H	S03	<u>1.</u> 07	ro	107	<u>1</u>	고 있	100	H0
																٠														
			•																		-									
											_									-							-			
																								•			•			
	-	-				a	·	· · · · ·		-														-						
															·	· ·							,			•.				
				•																						٠				
										\$	6				-	,	-								2		•			
																•			-	_										
									-			··																		
																														j

		•					-		-											-									
															4														,
					,													-: -				-						<u>-</u>	
						•	18								-						•								
H0593: 1, S0330: 1,	H0518: 1, L0748: 1,	.0439: 1, L0751: 1,	.0754: 1, L0749: 1,		H0653: 1, H0542: 1 and	H0423: 1.	AR061: 22, AR089: 5	L0803: 23, S0360: 7;	S0358: 6, L0794: 5,	.0777: 5, H0510: 4,	.0439: 4, L0731: 4,	.0757: 4, S0026: 4,	H0509: 3, L0662: 3,	.0805: 3, L0608: 3,	HO624: 2, T0002: 2,	S0218: 2, S0007: 2,	H0333: 2, H0574: 2,	.0471: 2, H0373: 2,	H0188: 2, H0644: 2,	.0363: 2, L0766: 2,	.0774: 2, L0651: 2,	.0776: 2, L0659: 2,	.0789: 2, H0521: 2,	2, L0745:	~	.0581: 2, L0362: 2,	.0601: 2, H0556: 1,		H0638: 1, S0354: 1,
	. <u>.</u>	<u> </u>	<u>H</u>	<u> </u>	يدر	يلر	7		<u> </u>	_=	15	.Н.	<u></u>		14	<u>(/)</u>	<u> </u>	Н	<u> </u>	<u>.</u>	<u>н</u>	H	<u>-11-</u>	. #	-13	<u></u>	.==		711
		٠									••				;					٠									
									-			•																	
							1263			•						•													
				•			377 - 138				٠	-			,		8												*
							363																						
	•				<u> </u>		715860															 ; .	*			•			
			_			٠.	HBICG44			•			·					-							*		*		
							353				-										0								

PCT/US01/01239

	-									-		-			-					•		0							
					•	· ·				·						·;												0	
S0444.1 H0637.1	TTOOO 1 TTO 4 11 . 1	HU2U8: 1, HU441: 1,	H0431: 1, H0586: 1,	L0623: 1, S0280: 1,	H0575: 1, T0082: 1,	H0581: 1, S0049: 1,	L0033: 1, H0596: 1,	L0040: 1, H0231: 1,	H0355: 1, H0622: 1,	T0023: 1, S0366: 1,	H0163: 1, H0040: 1,	H0551: 1, T0067: 1,	L0564: 1, L0764: 1,	L0775: 1, L0376: 1,	L0527: 1, L0783: 1,	L0809: 1, L0665: 1,	H0144: 1, H0672: 1,	S0330: 1, H0522: 1,	H0134: 1, S0028: 1,	L0744: 1, L0754: 1,	L0755: 1, S0031: 1,	L0588: 1, H0543: 1 and	H0008: 1.	AR089: 1, AR061: 1	L0439: 4, L0770: 2,	L0794: 2, L0438: 2,	L0740: 2, H0599: 1,	T0082: 1, S0003: 1,	H0644: 1, L0639: 1,
								,																Glu-30 to Glu-38,	Asn-47 to Tyr-58.				·
										-														1264					
																			-					3 - 356					
																		-						364					
					•																-			753717					
				•																				HSKXN70					
																							*	354					

				
S3014: 1, S0028: 1, S0206: 1, L0756: 1, L0779: 1 and L0752: 1.	AR089: 1, AR061: 0 S0028: 2, H0624: 1, S0278: 1, S0150: 1 and H0689: 1.	AR061: 4, AR089: 4	AR089: 1, AR061: 0 H0620: 2, H0012: 1, S0152: 1 and S0260: 1.	AR061: 402, AR089: 142 H0038: 7, L0758: 5, H0616: 4, L0731: 4, S0002: 3, L0637: 3, H0623: 2, L0794: 2, L0809: 2, L0663: 2, L0777: 2, S0046: 1, H0431: 1, T0060: 1, H0431: 1, S0003: 1, H0328: 1, H0412: 1, H0163: 1, H0412: 1, H0163: 1, H0100: 1, H0102: 1, H0100: 1, L0768: 1, L0768: 1, L0768: 1, L0803: 1, L0375: 1, L0803: 1, L0375: 1, L0803: 1, L0375: 1, L0803: 1, L0375: 1,
·			-	Glu-1 to Asp-7, Met-53 to Met-60, Ile-78 to Ser-83.
	1265	1266	1267	1268
	3 - 371	128 - 688	3 - 440	1 - 249
	365	366	367	368
	815942	835955	836491	836498
	HPIAC32	HHFFP57	HFKJW01	HSDFL63
	355	356	357	358

WO 01/55301 PCT/US01/01239

200			
L0542: 1, L0647: 1, L0367: 1, L0791: 1, L0664: 1, H0693: 1, S0328: 1, S0168: 1, S0031: 1 and H0008: 1.	AR089: 3, AR061: 3 H0333: 1 and H0510: 1.		AR089: 1, AR061: 1 H0544: 4, L0438: 4, L0439: 3, L0747: 3, S0036: 2, L0794: 2, H0539: 2, L0748: 2, L0485: 2, S0424: 2, S0116: 1, S0360: 1, S0046: 1, H0411: 1, H0261: 1, H0632: 1, H0574: 1, H0632: 1, L0021: 1, H0575: 1,
	Phe-13 to Lys-19, Gln-21 to Ser-37, Arg-44 to Tyr-60, Cys-84 to Asn-89, Thr-122 to Thr-128.	Pro-16 to Arg-23.	Pro-18 to Trp-25, Arg-164 to Ser-169, Pro-174 to Gln-185, Lys-220 to Phe-226, Ser-272 to Lys-290, Cys-316 to Val-329, Glu-431 to Gln-436, Ile-463 to Val-470.
	1269	1270	1271
	3 - 449	49 - 375	3 - 1451
	369	370	371
	857070	867363	871044
	HLD0008	HMSHN43	HBXCT92
	359	360	361

WO 01/55301 PCT/US01/01239

H0618: 1, H0052: 1, H0251: 1, H0309: 1, H0327: 1, S0050: 1, S6028: 1, L0456: 1, S0038: 1, H0494: 1, L0520: 1, L0764: 1, L0375: 1, L0657: 1, L0528: 1, H0660: 1, S0044: 1, S0028: 1, L0758: 1, L0759: 1, L0596: 1, L0592: 1,	AR061: 6, AR089: 2	AR089: 4, AR061: 4 H0265: 3, H0592: 2, H0494: 2, L0761: 2, L0374: 2, L0804: 2, H0519: 2, H0593: 2, H0556: 1, H0657: 1, H0656: 1, H0662: 1, S0358: 1, S0376: 1, H0437: 1, H0253: 1, H0437: 1, H0253: 1, L0766: 1, L0768: 1, L0766: 1, L0768: 1, L0766: 1, L0809: 1, L0666: 1, H0520: 1, H0539: 1, S0027: 1 and
		Arg-1 to Trp-9, Ala-25 to Ser-30. Elements of the ser-30 o
	1272	1273
	157 - 876	153 - 668
* -	372	373
	875744	875745
	H6EDP44	HLJBF94
	362	363

H0543: 1.	AR061: 7, AR089: 4 T0039: 1, H0123: 1, H0038: 1, H0040: 1, T0042: 1, S0126: 1, H0631: 1, L0596: 1 and H0506: 1.	AR089: 2, AR061: 2 L0766: 17, H0038: 2, L0794: 2, L0803: 2, H0144: 2, L0362: 2, S0114: 1, H0013: 1, H0675: 1, H0596: 1, H0628: 1, L0471: 1, S0250: 1, L0142: 1, H0628: 1, H0634: 1, H0616: 1, H0413: 1, H0056: 1, S0142: 1, L0789: 1, L0774: 1, L0791: 1, S0126: 1, L0743: 1, L0744: 1, L0743: 1, L0744: 1, L0754: 1, L0745: 1, L0754: 1, L0745: 1, L0756: 1, L0752: 1, L0756: 1, L0752: 1, L0750: 1, L0752: 1,	AR061: 5, AR089: 2 H0254: 1, H0255: 1,
	Ser-14 to Gln-19.	Arg-2 to Lys-28, Lys-43 to His-48, Arg-66 to Gly-76, His-117 to Cys-130.	Glu-15 to Glu-26, Thr-60 to Ile-66,
	1274	1275	1276
	1286 - 438	1 - 390	3 - 509
	374	375	376
	877182	969088	881288
	нтено28	HE9PC30	HLMDN29
	364	365	366

													•	•			<u></u>						*			 -		
	·																				,					•	*	
H0705: 1 and H0412: 1.	AR089: 1, AR061: 1 H0457: 12, H0521: 11,	H0179: 6, H0402: 5,	H0271: 3, H0581: 2,	H0188: 2, S0002: 2,	S0053: 2, H0522: 2,	H0436: 2, H0254: 1,	H0255: 1, H0306: 1,	H0638: 1, H0637: 1,	H0580: 1, H0619: 1,	S0278: 1, H0587: 1,	· ਜ਼ਜੋਂ	` — `	` , _;`	` — ``	S0344: 1, H0529: 1,	L0763: 1, L0770: 1,	L0667: 1, L0767: 1,	L0794: 1, L0774: 1,	L0653: 1, L0659: 1,	L0788: 1, S0052: 1,	្ន	S0308: 1, L0592: 1,	H0667: 1 and S0424: 1.	AR061: 1, AR089: 1	L0758: 19, L0777: 16,	L0750: 14, L0747: 13,	L0748: 10, H0692: 9,	L0775: 6, L0749: 6,
Gly-82 to Tyr-88.	Pro-1 to Gly-9, Pro-11 to Gly-18,	Asp-35 to Arg-55.													_			-						Pro-11 to Glu-17.			:	•
	1277		•																					1278				-
	1 - 330			-								2							-	•				92 - 340				
	377		٠		•														•			-		378				
	911355																							911465				
	HWBCF78																							HUKEN49				
	367																				- 0.			368				

			_						_			•						*										
															٠										٠			
·																			0	•					-		· .	
.0766: 5, L0774: 5, .0740: 5, L0752: 5, .0764: 4, 1.0662: 4	S0126: 4, L0601: 4,	H0624: 3, H0052: 3,	H0090: 3, H0560: 3,	.0769: 3, L0768: 3,	.0783: 3, L0756: 3,	.0755: 3, H0171: 2,	S0007: 2, H0497: 2,	H0486: 2, H0316: 2,	: 2, S0150: 2,	2, L0655: 2,	2, L0665: 2,	2, L0759: 2,	ر د د ا	: 2, H0341: 1,	: 1, H0458: 1,	: 1, S0418: 1,	1, S0360: 1,	<u> </u>	: 1, S0300: 1,	H0351: 1, H0601: 1,	: 1, H0013: 1,	: 1, H0069: 1,	: 1, H0318: 1,	: 1, H0421: 1,	: 1, H0327: 1,	H0046: 1, S0388: 1,	S0051: 1, S6028: 1,	1 50003.1
L0766: T0740:	S0126:	H0624	H0090	L0769:	L0783:	L0755:	S0007:	H0486	H0494:	L0776: 2,]	L0659:	S0027: 2	L0588: 2	H0542: 2,	H0664: 1	H0125:	S0376:	H0489:	S0132:	H0351	H0632: 1,	H0244:	H0427:	H0581:	H0204:	H0046	S0051	TINK87.
	,	ē.														•												
						٠.																						
					-					÷					- <u>-</u>	ē		-				•						
					-			*			-											-			 -	·		
						<u>· </u>		·			*											,						
							<u> </u>															, <u>.</u>						
																					н				-			-

														<u> </u>								A							
	· 					3		-														ě							
_				;	,		, <u></u>	·									4					771		2				····	
110616.1	T0006: 1,	L0055: 1,	H0551: 1,	, H0100: 1,	, S0142: 1,	H0529: 1,	L0770: 1,	L0761: 1,	L0641: 1,	L0767: 1,	L0383: 1,	L0792: 1,	L0664: 1,	H0547: 1,	H0682: 1,	, S0378: 1,	, H0555: 1,	, S3012: 1,	, L0439: 1,	L0731: 1,	L0608: 1,	H0543: 1, H0422: 1 and		, AR061: 6	S0212: 1,	10402: 1,	.0059: 1,	0002: 1,	0521: 1 and
TT0262. 1 E	4-1	-	H0038: 1, H	H0059: 1, H	H0647: 1, S	S0344: 1, H	L0763: 1, L	L0639: 1, L	L0667: 1, L	L0374: 1, L	L0375: 1, L	L0647: 1, L	L0663: 1, L	H0520: 1, H	`—^	H0670: 1, S	S0380: 1, H	H0478: 1, S	L0742: 1, L	L0754: 1, L	L0592:1, L	H0543: 1, E	H0352: 1.	AR089: 13, AR061	S0354: 2, S0212:	H0484: 1, H0402	S0358: 1, H0059:	H0494: 1, S0002: 1,	L0438: 1, H0521:
	3													•										Pro-16 to Arg-23,	Thr-148 to Leu-155,	Phe-203 to Asp-214,	Pro-255 to Ser-265.		
-	<u></u>	-		<u> </u>																			·		Thr-	Phe-	Pro-		
	-						n																	1279					
		ı																						63 - 860			,		
				i			•													8				379					
																								914401					
	-3									-					,				-					HCUDS02		9			
			.							•														369					

•				123829, 147570,	181430,	252940,	264700,	600194,	600808,	601284,	601769,	601769,	602116		٠		•				
		•		12q12-q14									···	-		(2					
L0751: 1.	AR089: 1, AR061: 1 H0457: 1, H0213: 1, H0634: 1 and S0002: 1.	AR061: 0, AR089: 0 S0282: 1, S0150: 1 and S0260: 1.	AR089: 1, AR061: 0 S0028: 2, S0142: 1 and S0344: 1.	AR061: 17, AR089: 4 H0556: 18, H0265: 8,	H0692: 8, L0748: 7,	H0543: 7, S0418: 6,	L0665: 5, L0747: 5,	H0445: 5, H0542: 5,	II 0769. 4 H0521. 4	L0750: 4, H0423: 4,	H0135: 3, H0551: 3,	H0560: 3, L0768: 3,	L0766: 3, L0775: 3,	L0776: 3, S0328: 3,	C)	L0439: 3, L0740: 3,	L0591: 3, L0608: 3,	H0170: 2, H0657: 2,	H0484: 2, H0052: 2,	H0545: 2, H0012: 2,	H0620: 2, H0083: 2,
	Thr-71 to Leu-78, Phe-126 to Gly-133, Arg-150 to Gly-159.	Arg-1 to Lys-10, Gln-39 to Asp-44.		Ala-40 to Leu-47, Gln-79 to Cvs-84.	Cys-95 to Thr-100.		• 30-					~									
	1280	1281	1282	1283					٠.												
	16 - 495	296 - 682	1 - 399	3 - 452																,	
	380	381	382	383		٠															
	914402	915649	915650	917349							•								-		
	HTTJU40	HFXJX41	HSLCK91	HSLA029																	
	370	371	372	373																	

·										
					•					
		 .		· · · · · ·	· 			·	 	
	 -									
	- - - - - -	ئے ہے۔ ا	- 1 -1 -	-î Lî Lî	. 	ਜੂ ਜੂ	ئے ئے		`^	Ļ
H0040: 2, H0087: 2, S0144: 2, L0640: 2, L0771: 2, L0773: 2, L0521: 2, L0363: 2, L0783: 2, L0783: 2, L0751: 2, L0751: 2, L0596: 2, L0595: 2, L0595: 2, H0472: 2, L05002: 1	2, 10002. 1, S0040: 1, H0656:	1, H0483: 1, S0420:	S0376: S0408:	1, S0045: 1, S0132: 1, S0278:	H0256: T0082:	T0110: H0544:	H0050: H0266:	H0328: H0031:	H0644: 1, H0628: H0181: 1, H0606:	H0068:
H0040: 2, 1 S0144: 2, 1 L0771: 2, 1 L0783: 2, 1 L0663: 2, 1 L0751: 2, 1 L0757: 2, 1 H0422: 2, 1	H0686: 1, S0218: 1, F	- ^ - -	-î -î -	ને _ે _ે	` — î — î		<u>-, -, -, -, -, -, -, -, -, -, -, -, -, -</u>	َ ہے َ	H0644: 1, H0181: 1,	54: 1, I
H0040: S0144: L077: L0521: L0783: L0663: L0751: L0757: L0595: H0422	H0686: S0218: H0341:	S0212: 1 H0177:	S0356: S0360:	F10208: S0046: L0717:	H0331: T0109:	H0309: H0327:	H0041: S0051:	H0252: H0604:	H06 H01	S0364:
					•					
		.*								
			• • •				•			
										
	•									
!		•								
		.*								
	·									
<u> </u>			• • • • • • • • • • • • • • • • • • • •			·				
;	٠									
										.,
. ==		-			-					

0						-			•		·	•	*			_ _	- 1:		•							-		
	.: - <u></u>			_					_					 .											Ø			
•																					-							
H0090: 1, H0616: 1,	H0100: 1, L0351: 1,	L0065: 1, S0438: 1,	H0509: 1, S0150: 1,	S0472: 1, H0647: 1,	S0422: 1, S0002: 1,	S0426: 1, L0500: 1,	L0637: 1, L0772: 1,	L0372: 1, L0645: 1,	L0662: 1, L0364: 1,	L0388: 1, L0774: 1,	L0375: 1, L0805: 1,	L0653: 1, L0655: 1,	L0657: 1, L0559: 1,		L0382: 1, L0792: 1,	L0666: 1, L0664: 1,	H0144: 1, H0703: 1,	L0438: 1, H0435: 1,	S0380: 1, H0522: 1,	H0696: 1, S0028: 1,	L0744: 1, L0754: 1,	L0779: 1, L0758: 1,	L0759: 1, S0011: 1,	H0668: 1, S0192: 1,	S0276: 1 and S0424: 1.	AR051: 19, AR089:	14, AR061: 6, AR054:	
																												-
																		,			9					1284		
	***	•							*				• =		,											2 - 859		
													_										-			384		
										<u> </u>				-					•							917583	-	
		,							-					-				-				- i, -	,-			HRDBJ38		
·									· · · · ·				*													374		

					104770, 107300, 107670, 110700, 131210, 136132, 146790, 150292, 159440,
	e e		·		1922-925
H0124: 14, L0744: 4, S0036: 2, L0743: 2, L0759: 2, H0581: 1, H0457: 1, L0163: 1, H0616: 1, L0763: 1, L0776: 1, L0659: 1, L0778: 1, L0666: 1, L0783: 1, L0666: 1,	AR061: 1, AR089: 0 S0040: 1 and S0278: 1.	AR061: 2, AR089: 1 L0761: 2, L0791: 2, S0354: 1 and H0682: 1.	AR089: 46, AR061: 9	AR089: 7, AR061: 6 S0116: 1, H0646: 1 and L0731: 1.	AR089: 6, AR061: 5 S0360: 9, L0642: 5, L0752: 5, L0662: 4, L0659: 4, L0666: 4, S0007: 3, L0646: 3, L0776: 3, L0750: 3, H0662: 2, S0222: 2, L0483: 2, L0764: 2, L0648: 2, L0775: 2, L0666: 2, H0648: 2,
	Pro-89 to Leu-102.	Gly-6 to Cys-12, Glu-48 to Asp-54, Ile-61 to Ser-73, Asn-75 to Thr-85, Gln-111 to Thr-118.	Pro-20 to Ala-30.	-	Leu-51 to Asp-57, Leu-91 to Lys-97, Asp-143 to Pro-148.
	1285	1286	1287	1288	1289
	3 - 317	3 - 398	84 - 794	149 - 439	77 - 817
	385	386	387	388	389
	918119	918520	919363	922114	930778
	HOUES64	HWLHU02	HEAHA84	HBMXQ90 922114	HOEJV72
-	375	376	377	378	379

ſ			-															-												
0,,00,,	159440,	159440,	173610,	186780,	191030,	191315,	208250,	233710,	600923,	600995,	601412,	601518,	601652,	602491			<u>:</u>													
															•										٠,					
	L0779: 2, S0031: 2,	S0110: 1, H0638: 1,		S0444: 1, L0717: 1,	٠ ســــر	S0414: 1, H0492: 1,	H0156: 1, L0021: 1,	S0049: 1, H0310: 1,	H0327: 1, H0373: 1,	T0010: 1, S6028: 1,	H0615: 1, S0366: 1,	S0036: 1, H0038: 1,	H0616: 1, H0413: 1,	T0041: 1, H0494: 1,	S0438: 1, H0509: 1,	S0142: 1, S0210: 1,	L0598: 1, L0762: 1,	<u>_</u>	L0772: 1, L0766: 1,	L0551: 1, L0774: 1,	L0664: 1, H0547: 1,	S0126:1, H0659:1,	S0378: 1, S0152: 1,	S3014: 1, L0439: 1,	L0740: 1, L0754: 1,	L0756: 1, L0780: 1,	L0755: 1, L0758: 1,	S0434: 1, S0026: 1 and	H0667: 1.	AR089: 1, AR061: 0
					٠		- *						-		-			=									-		•	
														-	•						,		,							1290
			•				•																		*					455 - 2239
		•																0						,			,			390
		-													*						-	<u> </u>	<u>·. </u>				•			933364
		•		•																							3			HRDBH58
									•						,			į		·										380

					-		•	_																						
			-					· ·	-:				,,,			·					_	•		00	•					
1 TOCOO: 2 T 0704: 2	II0020. 3, L0/24. 3,	S0212: 2, H0254: 2,	H0545: 2, H0266: 2,	L0639: 2, L0759: 2,	H0556: 1, H0657: 1,	S0418: 1, H0580: 1,		H0550: 1, H0600: 1,	H0590: 1, H0253: 1,	H0581: 1, H0052: 1,	H0309: 1, H0085: 1,	H0083: 1, H0628: 1,	H0617: 1, H0124: 1,	H0059: 1, H0494: 1,	S0144: 1, S0142: 1,	S0426: 1, H0529: 1,	L0796: 1, L0659: 1,	L0790: 1, H0519: 1,	H0711: 1, S0328: 1,	H0521: 1, H0522: 1,	S3014: 1, L0758: 1,	S0260: 1, H0343: 1,	S0434: 1, L0601: 1,	H0668: 1 and H0542: 1.	AR061: 9, AR089: 9	H0318: 1, H0052: 1,	H0264: 1, S0386: 1 and	H0521: 1.	AR061: 1, AR089: 1	L0748: 6, L0749: 4,
				•												*									Val-8 to Gly-15,	Asp-41 to Thr-47.			Gly-1 to Gly-7,	Lys-30 to Gly-36,
						-										•	γ-			•.					1291				1292	
									-		٠										٠				1 - 690				50 - 361	
												÷				•			-						391	. *			392	
					2.5				-				-		-					•		· ·			951413				951652	-
				•		•				,							3								HCE3E13				HUKF068	
				٠,																•					381				382	

					_	 -				\neg				7				_			_					\neg
				•	·																			116806,	120120,	120120,
					•					·		न			7			•			-			3p21.3		
H0670: 3, H0261: 2,	S0222: 2, L0771: 2, L0803: 2, S0358: 1,	S0360: 1, H0632: 1, H0575: 1. H0615: 1.	H0059: 1, H0509: 1,	.0772: 1, L0646: 1,	L0764: 1, L0662: 1,	J0805: 1, L0776: 1 and	L0596: 1.	AR089: 1, AR061: 0	S0282: 2 and H0135: 1		AR089: 1, AR061: 0	S0180: 1, H0416: 1 and	S0028: 1.		AR061: 4, AR089: 1	H0266: 2, H0013: 1	and L0758: 1.			AR061: 11, AR089: 8	S0007: 1, S0046: 1,	H0052: 1, H0039: 1 and	00439: 1.	AR061: 2, AR089: 2	L0592: 2, H0013: 1, H0178: 1 H0000: 1	H0032: 1, H0529: 1,
Arg-96 to Asn-104.	<u>и н</u>				-				Thr-84 to Leu-90,	Asp-103 to Gln-114.	Ser-10 to Gln-18.		5,	Arg-11 to Glu-20.		-16,		Gly-42 to Lys-49,	Ile-59 to Gly-66.	Asp-3 to Gly-11.						
								1293			1294			1768	1295				-	1296			•	1297		
								170 - 580			1 - 318			454 - 137	1-267					305 - 3	3			64 - 306		•
					•			393			394			898	395					396				397		4
		<u> </u>			-);			959204			407351		-	422687	465267			".		503077				549423		
							Ð	HFXJW08			HBTAD04		•	•	HE8FG51					HTPDU31		·		HMUBV12		
			·					. 383			384				385			-		386				387		•

		
120436, 120436, 120436, 138320, 168468, 182280,		•
·		·
L0772: 1, H0521: 1 and L0780: 1.	AR061: 3, AR089: 3 L0747: 9, L0794: 5, L0789: 4, L0662: 3, L0803: 3, S0152: 3, L0439: 3, L0777: 3, L0757: 3, L0593: 3, H0624: 2, H0318: 2, H0673: 2, H0412: 2, L0776: 2, L0764: 2, L0776: 2, L0748: 2, H0171: 1, T0049: 1, H0449: 1, H0580: 1, H0657: 1, H0661: 1, H0619: 1, H0580: 1, H0652: 1, H0620: 1, H0052: 1, H0620: 1, H0052: 1, H0620: 1, H0051: 1, H0620: 1,	
•	Arg-3 to Gln-14, Gln-25 to Glu-30.	÷
	1298	
·	40 - 618	
	398	
	574062	
	HMHBS90	
	388	

	· · · · · · · · · · · · · · · · · · ·	,	
	10p15.1		
S0142: 1, H0529: 1, L0763: 1, L0770: 1, L0769: 1, L0761: 1, L0643: 1, L0644: 1, L0773: 1, L0767: 1, L0766: 1, L0381: 1, L0527: 1, L0659: 1, L0809: 1, L0666: 1, H0689: 1, H0435: 1, H0670: 1, S037: 1, S0027: 1, L0779: 1, L0752: 1, L0779: 1, L0752: 1, L0758: 1, L0752: 1, L0758: 1,	AR061: 5, AR089: 2 S0007: 2, H0024: 2, L0749: 2, S0003: 1, H0659: 1, L0748: 1, L0740: 1, L0758: 1 and L0595: 1.	AR061: 6, AR089: 2 S0001: 1 and S0045: 1.	AR089: 2, AR061: 1 L0659: 13, L0731: 12, L0803: 9, L0439: 9, L0601: 8, S0152: 7, L0756: 7, H0551: 6, L0666: 5, L0747: 5, L0646: 4, L0375: 4,
·	Phe-10 to Asn-18, Leu-80 to Ile-86, Ile-118 to Arg-123.		Arg-1 to Phe-19, Gln-22 to Arg-28, Leu-92 to Thr-108.
	1299	1300	1301
	2 - 436	214 - 2	3 - 434
	399	400	401
	575733	577384	592105
	HLHGH34	HELHC55	HKAAZ66
	389	390	391

Ÿ		8					•			-													•	-		-		-	•	
																						· 	- -					·	-	
																									-					
			-			,				•																				
.0438: 4, H0519: 4,	.0599: 4, L0600: 4,	S0045: 3, H0013: 3,	H0050: 3, H0622: 3,	H0644: 3, H0494: 3,	L0372: 3, L0662: 3,	H0670: 3, H0660: 3,	L0602: 3, H0521: 3,	L0752: 3, L0757: 3,	L0758: 3, S0212: 2,	S0001: 2, S0046: 2,	L0717: 2, H0266: 2,	S0022: 2, H0031: 2,	H0628: 2, H0264: 2,	H0412: 2, L0770: 2,	2, L0649:	L0804: 2, L0378: 2,	L0654: 2, L0655: 2,	L0517: 2, H0689: 2,	H0672: 2, H0539: 2,	0740: 2, L0754: 2,	.0590: 2, H0265: 1,	H0556: 1, S0040: 1,	T0049: 1, S0116: 1,	S0356: 1, S0354: 1,	S0444: 1, S0360: 1,	S0132: 1, H0549: 1,	-î	Ţ	T0039: 1, T0040: 1,	S0280: 1, L0021: 1,
	=	<u>V1</u>		<u> </u>	<u> </u>	<u>н</u>		. Н.	_=		H	LO	<u> </u>	14		Н	<u> </u>		Ħ	H	Н	1		VI	<u> </u>	<u>U</u>			<u>.c.</u>	<u> </u>
										<i>.</i>																				
	•																	٠.									· ·			
			4									0.0			1				·		, -					•				-
						•	•										•									*				
	•																							<u> </u>						
														`				*												,
	-								-																			:		_
					-															1										

		_									- ;	-					*												
•																							•						
		<u> </u>			_											<u> </u>			0			<u> </u>	-;	•		•			
																													•
1,						1,	1,	•	1,			1,	1,	·			•	•		•	•	•	•	•	•	*	•		
10042:	T0082: 1	, H0581: 1	L0040: 1	L0041: 1	L0471: 1	l, H0051:	1, H0375:	S0214: 1	10039:	1, H0553: 1	10316: 1	, H0591:	, H0268:	1, H0561: 1	S0210: 1	,0520: 1	L0638: 1	L0772: 1	L0764: 1	L0364: 1	L0774: 1	L0523: 1	L0653: 1	L0538: 1	L0544: 1	L0663: 1	S0052: 1	H0144: 1	, H0435:
H0002: 1, H0042:	H0575: 1, T	S0474: 1, H	Ę,	Ļ	H0123: 1, I	H0373: 1, F		S0003: 1, S	H0615: 1, H0039:	L0483: 1, E	S0364: 1, H0316:	H0598: 1, F	H0477: 1, F	``	<u> </u>	H0695: 1, I	L0640: 1, L	L0796: 1, L	.0373: 1, L		.0794: 1, I	_	.0805: 1, L	Ţ,	.0519: 1, L	.0789: 1, L	L0664: 1, S		H0684: 1, F
HOOH	H05	S04,	H04	H03	H01	H03	H02	<u>00S</u>	90H	104	S03	H05	H04	S03	90H	90H	106	107	L03	106	L07	106 106	108 108	106	L05	L07	106 106	S04	H06
-					٠							٠				•													
								•										:			•							-	
			•				<u> </u>								•									- -	·	,	-12		
					•																			٠					. •
		····	•								-												÷						
	*										-,	<u>-</u>						•			-	•							•
						•													*	٠		*		,					
		0	_									-				•	•				1								
_																		<u> </u>											
													٠																
-					<u></u>					,··-	÷	•					-									-	·		

			<u></u>
			106165, 117700, 117700, 150210, 169600, 180380, 180380, 190000, 203500, 222900, 232050, 276902, 600882,
- 2		5 2q37.2 1.	0 3q21-q25 1.
S0378: 1, H0696: 1, H0704: 1, H0436: 1, S0390: 1, S3014: 1, S0028: 1, L0777: 1, L0755: 1, H0445: 1, L0588: 1, L0605: 1, L0485: 1, S0026: 1, S0192: 1, S0194: 1, H0542: 1, S0412: 1 and	AR089: 2, AR061: H0013: 1, S0010: 1, S0051: 1 and L0741: 1	AR061: 8, AR089: 5 S0052: 1 and H0136: 1	AR061: 1, AR089: S0360: 2, H0553: 2, L0776: 2, L0744: 2, L0747: 2, L0744: 2, H0542: 2, S0110: 1, S0400: 1, H0441: 1, H0392: 1, H0687: 1, H0647: 1, L0631: 1, L0638: 1, L0774: 1, L0638: 1, L0774: 1, L0638: 1, L0749: 1, S0332: 1, L0743: 1, L0749: 1,
の 日 日 日 日 日 日 日 日 日 日 日 日 日	AF H SO	His-51 to Gly-56. AF	Ser-8 to Ala-16, Leu-51 to Gln-56, Sur-61 to Ala-73, Lou-70 to Thr-83, Gln-90 to Glu-104, Glu-118 to Asp-127. Ho Ho Ho Lou-104, Ho Ho Ho Lou-104, Ho Ho Lou-104, Ho Ho Lou-104, Ho Ho Lou-104, Ho Ho
	1302	1303 His	1304 Ser- Leu Tyr Ala Glu Glu
	1 - 396	1 - 207	1 - 486
	402	403	404
	657367	660310	661396
	HHSCN33	HNGJQ15	HDJME16
	392	393	394

601199, 601199, 601471, 601682	*	
)))		
	AR089: 1, AR061: 0 L0749: 8, L0759: 6, L0789: 3, L0748: 3, H0624: 2, L0471: 2, H0266: 2, H0170: 1, H0171: 1, S0360: 1, S0222: 1, H0441: 1, H0244: 1, H0251: 1, H0014: 1, H0553: 1, H0032: 1, S0036: 1, L0766: 1, L0653: 1, H0593: 1, H0690: 1, H0593: 1, H0690: 1, H0593: 1, L0439: 1, L0740: 1, L0751: 1, L0740: 1, L0756: 1, L0731: 1, L0589: 1, H0668: 1 and H0293: 1.	AR061: 9, AR089: 7 L0766: 9, L0731: 5, S6028: 2, L0779: 2, H0650: 1, S0001: 1,
	Asp-19 to Trp-25.	Arg-7 to Trp-13, Thr-18 to Trp-29, Gly-55 to Ser-60.
	1305	1306
	3 - 365	1 - 303
	405	406
	670033	677036
	HNTNR64	HMICO24
	395	396

*	502014			
	9q21.11-21.33 602014		-	
S0222: 1, L0021: 1, H0553: 1, H0551: 1, H0488: 1, S0426: 1, L0783: 1, L0784: 1, L0783: 1, L0666: 1, S0374: 1, H0365: 1, H0659: 1, H0539: 1, H0555: 1, L0777: 1, L0758: 1, L0366: 1 and	AR061: 0, AR089: 0 L0439: 8, L0438: 7, L0666: 4, H0685: 1, S0376: 1, S0360: 1, L0444: 1, L0021: 1, H0036: 1, H0553: 1, L0772: 1, L0771: 1, L0768: 1, L0774: 1, L0651: 1, L0659: 1, H0684: 1, H0672: 1 and L0754: 1.	AR089: 1, AR061: 0 S0028: 2, S0218: 1, S0001: 1 and S0390: 1.	AR089: 2, AR061: 0 H0687: 2, S0050: 1, S0028: 1, S0031: 1 and S0260: 1.	AR061: 6, AR089: 4 L0439: 2, H0052: 1,
	Arg-34 to Thr-40, Asp-79 to Gly-90. I	7, 53	Ala-29 to Leu-35, Ala-45 to Pro-53, Ser-80 to Arg-89, Val-111 to Cys-118.	
,	1307	1308	1309	.1310
	92 - 424	3 - 473	163 - 624	3 - 581
	407	408	409	410
	679292	268289	698259	702955
	HSIAC23	HSLFL74	HSDJD53	HCEBF33
	397	398	399	400

					-													•										
																				_		•		 -				
	8ater	•		0			_						_															
H0644: 1, H0520: 1 and	AR061: 4, AR089: 1		L0751: 4, H0039: 3,	H0617: 3, L0646: 3,	L0809: 3, L0779: 3,	H0295: 2, H0255: 2,	S0358: 2, H0575: 2,	H0457: 2, H0181: 2,	H0673: 2, L0637: 2,	L0743: 2, L0750: 2,	L0758: 2, S0116: 1,	H0663: 1, S0356: 1,	S0376: 1, S0360: 1,	$\overline{}$	H0497: 1, H0590: 1,	H0618: 1, H0253: 1,	H0545: 1, S0051: 1,	H0622: 1, H0030: 1,	H0135: 1, H0538: 1,	S0426: 1, H0529: 1,	L0763: 1, L0769: 1,	L0764: 1, L0771: 1,	L0773: 1, L0775: 1,	L0788: 1, L0663: 1,	H0144: 1, L0438: 1,	H0690: 1, H0670: 1,	H0672: 1, S0328: 1,	S0406: 1, H0187: 1,
	Asn-3 to Arg-11.	Gln-42 to Asp-50.	•							-				×	•													
	1311	•						•																				
	1 - 327	,			•							,	,															
	411							•					-															
	705518					*										,												
	HAPOW27 705518	,																						•				
	401																•											

			,							٠.													-	-	•			
					•			*		, -	•			·			-	•										-
L0747: 1, L0749: 1, L0759: 1 and L0608: 1.	AR089: 2, AR061: 1	H0556: 8, L0596: 8,	L0588: 6, H0618: 5,	H0266: 5, H0038: 5,	H0616: 5, H0547: 5,	L0740: 5, H0265: 4,	S0022: 4, H0591: 4,	H0529: 4, L0769: 4,	L0766: 4, L0664: 4,	H0521: 4, L0747: 4,	S0420: 3, H0497: 3,	H0253: 3, H0031: 3,	H0135: 3, H0264: 3,	H0056: 3, H0494: 3,	L0657: 3, L0438: 3,	L0748: 3, L0777: 3,	L0758: 3, H0543: 3,	H0624: 2, H0656: 2,	S0418: 2, S0007: 2,	H0333: 2, H0013: 2,	S0010: 2, H0596: 2,	L0471: 2, H0083: 2,	H0039: 2, H0622: 2,	H0617: 2, H0068: 2,	H0163: 2, H0623: 2,	H0100: 2, L0369: 2,	L0763: 2, L0764: 2,	쁴
	Glu-46 to Gly-54,	Val-64 to Ala-69,	Glu-74 to Leu-79,	Glu-90 to Glu-97.						:	•. •		٠			···	•									-	:	
	1312						÷					•					•											
	133 - 513	•						,	,								 	· · · · · ·				•		•				
	412								•		-		-			•			o' -									- (
	707183														:-								-					
	HCFLZ28		,		,				_			,															•	
	405								-									•						*				

			•		7 1
				•	
t			•		*
				 .	
+ + +					
L0663: 2, H0144: 2, H0701: 2, H0520: 2, H0690: 2, H0539: 2, E0478: 2, L0439: 2, L0750: 2, L0750: 2, L0593: 2, L0593: 2, L0593: 2, L0593: 2, H0170: 1, H0171: 1, S0402: 1, S0358: 1, S0405: 1, S0358: 1, H0550: 1, S0222: 1, H0550: 1, H0587: 1, H0587: 1, H0101:	77: 146: 124: 1	73: 1	24: 1, 14: 1,	12: 1. 39: 1.	î - î - î - î i 0, m c
2, H0144: 2, H0520: 2, H0539: 2, L0439: 2, L0759: 2, L0595: 2, H0542: 1, H0171: 1, S0356: 1, H0550: 1, H0550: 1, H0550: 1, H0550: 1, H0592: 1, H0593: 1, H05	, H0597: , H0546: , H0024:	H0373: H0401:	l, H0383: l, H0124: , H0634:	1, H0412: 1, H0059:	1, H0560: 1, H0633:
L0663: 2, H0144: H0701: 2, H0520: H0690: 2, H0539: H0478: 2, L0439: L0750: 2, L0759: 2, L0593: 2, L0595: 2, H0170: 1, H0171: S0402: 1, S0356: 1, S0358: 1, S045: 1, S0222: 1, H0550: H0587: 1, H0642: H0587: 1, H0101: H0114: 1, H0101: H0082: 1, S0346: 1	<u> </u>			H0551: 1, H0412: H0413: 1, H0059: H0102: 1, S0112:	; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;
L0663: H0701: H0690: H06478: L0750: L0593: L0593: H0170: S0046: L0717: H0587: H	T0115: 1 H0530: H0050:	H0015: 1	H0553: 1 H0673: 1 S0366: 1	H0551: 1 H0413: 1 H0102: 1	L0475: 1 S0150: 1 H0538: 1
<u> </u>	<u> </u>	<u> </u>	<u>ri iri (vi</u>	<u> </u>	<u> </u>
		. *			
·					
**			•		
		7	******		 .
	· · · ·	— · · .			 .
					•
					•
<u> </u>					
· · · · · · · · · · · · · · · · · · ·					;
·					-
					
0.				·	<u> </u>

ō				· · · ·								
	*		•				•					
الثالث الثارث	-î - î - î - î	S0374: 1, H0519: 1, S0126: 1, H0711: 1, S0328: 1, S0152: 1,	H0696: 1, H0626: 1, H0627: 1, L0752: 1,	L0755: 1, L0757: 1, H0445: 1, L0591: 1,	L0581: 1, L0601: 1, H0665: 1, H0136: 1.	S0192: 1, H0423: 1,	L0697: 1, S0424: 1 and H0293: 1.	AR089: 13, AR061: 6	E0739: 2, FR0012: 1, S0294: 1, L0809: 1, L0791: 1 and L0777: 1.	H0255: 2, H0163: 1, H0691: 1 and L0747: 1.	AR089: 2, AR061: 1	AR050: 48, AR054: 42, AR051: 37, AR061:
	×				•			Lys-14 to Leu-21.	ž Y		Asp-34 to Ser-44.	Arg-1 to Asp-11, Thr-15 to Thr-21,
	-							1313		1314	1315	1316
							4	3 - 449		221 - 478	163 - 558	1 - 303
								413		414	415	416
			·			· .		710377		713770	717556	722240
								HWCAB58		HLMMC57 713770	HMELH37	HNGJISS
							·	403	-	404	405	406

*.					·
6, AR089: 3 H0164: 1, S0052: 1 and S0031: 1.	AR061: 47, AR089: 2	AR089: 1, AR061: 0 H0525: 1	AR089: 4, AR061: 2 S0218: 1, S0222: 1, H0617: 1, S0150: 1 and S0260: 1.	AR089: 14, AR061: 7 H0031: 2, H0624: 1, S0116: 1, S0354: 1, S0045: 1, H0581: 1, H0046: 1, H0428: 1, H0038: 1, H0494: 1,	AR050: 10, AR051: 4, AR054: 3, AR089: 1, AR061: 1 H0544: 1 and S0028: 1.
Fro-93 to Glu-101. His-8 to Gly-18, Glu-30 to Asp-36, Thr-40 to Thr-46, Pro 118 to Aly 133	110 110 00 110.		Pro-19 to Thr-31, Asp-137 to Ser-143.	Ser-9 to Asp-15, Glu-20 to Asp-28, Glu-34 to Cys-40.	Pro-5 to Lys-12, Ala-31 to Pro-41, Phe-58 to Thr-63, Gln-83 to Phe-89, Pro-102 to Leu-116, Ser-130 to Asp-138, Pro-196 to Gln-208, Tyr-231 to Ala-240,
1769	1317	1318	1319	1320	1321
218 - 646	128 - 358	50 - 424	282 - 752	174 - 365	99 - 1646
698	417	418	419	420	421
868063	724795	731302	739212	751953	753247
	HHGDG42	HMTMF31	HSDIF59	HNDAG60	HSLDS79
	407	408	409	410	411

,			-
	H0590: 1 and N0006:	1, AR061: 2, H0553: 2, 2, L0754: 2, 1, S0001: 1, 1, T0048: 1, 1, S0003: 1, 1, H0412: 1, 1, H0365: 1, 1, H0555: 1, 1, L0777: 1 ap.	AR061: 2, AR089: 2 S0052: 3, L0438: 3, H0063: 2, H0144: 2, L0439: 2, L0587: 2, S0342: 1, L0785: 1,
Gly-252 to Arg-257, Arg-269 to Ser-281, Ala-289 to Ala-297, Phe-314 to Thr-327, Ala-371 to Ile-376, Tyr-379 to Trp-387, Lys-394 to Asn-400, Lys-443 to Gly-453, Asp-490 to Glu-497, Val-510 to Glu-516.	Asn-31 to Ser-38, Pro-82 to Thr-89. Glu-9 to Trp-18.	Phe-1 to Lys-7, Met-14 to Gly-20.	Ala-55 to Ser-60, His-83 to Gly-90.
	1770	1323	1324
	349 - 2		17 - 376
	870	423	424
	879215	769103	788957
	HFBCQ61	HRACD17 769103	HLDQV23
	412	413	414

T0082: 1, H0009: 1, H0083: 1, H0510: 1, H0266: 1, H0135: 1, T0041: 1, H0494: 1, L0369: 1, L067: 1, L0800: 1, L0774: 1, L0787: 1, H0547: 1, L0747: 1, L0759: 1,	AR089: 1, AR061: 0 H0619: 1, H0431: 1, S0148: 1, H0519: 1, L0589: 1, L0591: 1 and L0594: 1.	AR061: 168, AR089: 115 H0556: 6, H0265: 4, H0040: 4, S0418: 2, S0420: 2, H0266: 2, H0038: 2, T0002: 1, T0049: 1, S0045: 1, S0046: 1, S6022: 1, H0634: 1, L0766: 1, H0634: 1, L0766: 1, S0052: 1, S0126: 1, H0539: 1, S0126: 1, L0751: 1, L0749: 1, L0751: 1, L0749: 1, L0751: 1, L0591: 1,
	Cys-26 to Trp-34, Phe-111 to Asp-119.	Thr-2 to Arg-7, Asp-37 to Trp-42.
·	1325	1326
	1 - 384	1 - 441
	425	426
,	812327	812373
	HPHAF45	HSUME31
	415	416

	·																			_	
			-	107777,	123940,	139350, 139350,	148040,	148041,	148043,	148070,	231550,	600194,	600231,	600536,	600808,	600956,	601284,	601769,	601769,	601928,	602116,
				12q13																	*
S0276: 1 and H0543: 1.	AR089: 2, AR061: 1 H0437: 1 and H0538: 1.	AR050: 9, AR054: 3, AR051: 1, AR061: 0,	S0028: 2, S0134: 1, S0132: 1 and S0222: 1.	AR089: 1, AR061: 0	H0478: 3, S0278: 2,	50/51: 2, 50001: 1, 50360: 1, 80132: 1,	H0619: 1, H0263: 1,	S0036: 1, H0040: 1,	H0494: 1, S0142: 1,	S0344: 1, L0764: 1,	L0766: 1, S3014: 1,	L0748: 1, H0445: 1 and	S0434: 1.	-	,			•.			
<u> </u>	Pro-8 to Arg-14, Glu-16 to Arg-23, Gly-25 to Pro-30, Arg-59 to Glu-69,	Pro-78 to Glu-83.										7						-			۷.
	1327	1328		1329												:		•	•		
	2 - 412	390 - 1031		2 - 571																	
	427	428		429																	
	815819	824708		836598								٠									
	HUSHB56	HTGDN81		HSKHY26	a l																
	417	418		419				•						,							

602153																											
					-												,										
	AR089: 12, AR061: 6 L0766: 4, H0052: 3,	L0662: 3, L0776: 3,	L0666: 3, L0665: 3,	H0521: 3, H0438: 2,	H0581: 2, H0263: 2,	H0494: 2, L0763: 2,	L0770: 2, L0769: 2,	L0649: 2, L0664: 2,	L0748: 2, L0439: 2,	L0747: 2, S0436: 2,	H0265: 1, H0556: 1,	S0040: 1, H0656: 1,	S0444: 1, S0278: 1,		_	 H0309: 1, H0545: 1,	1,		H0553: 1, H0412: 1,	H0646: 1, S0002: 1,	L0796: 1, L0644: 1,	L0764: 1, L0774: 1,	L0376: 1, L0806: 1,	L0654: 1, L0659: 1,	L0383: 1, H0547: 1,	S0126: 1, H0684: 1,	H0435: 1, H0478: 1,
	Pro-34 to Val-40, Thr-65 to Asp-70.	4				•				•						-		-		-							
	1330													•					•					,			
	72 - 536			. •	•																•		0				
	430				•																•					•	
	837698																										
	HKACD80										i.																
	420						1																ē				

S0028: 1, L0751: 1, L0754: 1, L0749: 1, L0750: 1, L0779: 1, L0759: 1, H0543: 1 and H0423: 1.	AR089: 257, AR061: 210 H0050: 1, L0194: 1 and H0555: 1.	AR089: 102, AR061: 58 H0013: 1, S0250: 1, S0022: 1, H0038: 1, L0659: 1, H0144: 1 and S0390: 1.	AR061: 8, AR089: 6 H0641: 9, L0748: 6, L0731: 5, L0777: 4, L0758: 4, L0771: 3, L0755: 3, H0638: 2, H0622: 2, L0769: 2, L0766: 2, L0769: 2, L0766: 2, L0775: 2, S0126: 2, H0518: 2, H0521: 2, H0528: 2, H0521: 2, L0779: 2, H0423: 2, L0779: 2, H0657: 1, L0785: 1, H0661: 1, L0785: 1,
	Asn-1 to Gly-8, His-10 to Lys-15, Gly-96 to Cys-102, Pro-104 to Phe-109.	Leu-1 to Tyr-8, Lys-21 to Asn-27, Asn-33 to Thr-49.	
	1331	1332	1333
	1 - 384	3 - 725	123 - 1031
	431	432	433
	837782	838043	848205
	HHFDK48	HE9SS77	HAPOK49
	421	422	423

WO 01/55301 PCT/US01/01239

												•																	
								,				<u> </u>			*		<u></u>								•		•		
					A	- 			<u> </u>	* 			*.				•			5				-					
.0622: 1. H0486: 1.	,	<u>, </u>	Ŧ,	H0617: 1, H0090: 1,	H0063: 1, H0130: 1,		20763: 1, L0770: 1,	.0761: 1, L0772: 1,	.0372: 1, L0764: 1,	,0768: 1, L0774: 1,	.0776: 1, L0655: 1,	.0659: 1, L0542: 1,	.0789: 1, L0666: 1,	L0663: 1, L0438: 1,	H0435: 1, S0044: 1,	S0404: 1, H0187: 1,	H0478: 1, L0747: 1,	L0759: 1, L0591: 1 and	H0543: 1.		H0550: 2, L0662: 2,	H0657: 1, H0662: 1,	H0619: 1, S0474: 1,	HO081: 1, L0471: 1,	H0428: 1, H0031: 1,	H0063: 1, H0494: 1,	0642: 1, L0666: 1,	J0/48: 1 and L0/47: 1	AR061: 7, AR089: 7
10,1	Ò) H	HO	ŎĦ	ŎĦ	<u>800</u>	100		<u>5</u>	50	100	<u>100</u>	100	ន្ន	Ě	S04	ÌΗ	10	HO	AR				9,		OH	2	Ľű,	
		٠							•							•	•			His-1 to Thr-6,	Pro-14 to Trp-21,	Glu-43 to Gly-50,	Asp-97 to Gly-103,	Glu-141 to Asp-149,	Ile-199 to Gly-204.	•			Glu-86 to Asp-93,
					•					-							÷			1334	٠							*	1335
									•		•									3 - 635		-							258 - 1001
		· ·							-											434									435
	-																			848318	•								849278
			,																	HPMGN48									HUVHP54
																		•		424									425

																							•		-				
_															<u> </u>					·						,			
									;					•									•						
-	 ;			***								· · ·	<u>. </u>					1					-				1		_
S0358: 5, H0590: 2,	H0623: 2, L0803: 2,	S0152: 2, S3014: 2,	L0754: 2, H0458: 1,	S0354: 1, H0549: 1,	H0431: 1, H0497: 1,	H0042: 1, H0036: 1,	H0581: 1, H0196: 1,	T0115: 1, H0024: 1,	H0275: 1, H0622: 1,	S0364: 1, H0124: 1,	H0056: 1, H0429: 1,	S0150: 1, L0640: 1,	L0642: 1, L0804: 1,	L0666: 1, S0330: 1,	H0478: 1, S0027: 1,	S0206: 1, L0592: 1,	L0604: 1 and S0424: 1	AR061: 1, AR089:	S0028: 3, S0222: 2,	L0105: 2, S0050: 2,	S0390: 2, S0260: 2,	H0344: 1, H0381: 1,	S0282: 1, H0618: 1,	S0051: 1, S6028: 1,	H0271: 1, H0383: 1,	H0264: 1 and S0038:	AR089: 2, AR061:	L0766: 4, L0809: 2,	L0756: 2, L0605: 2,
Trp-100 to Asp-110,	Asp-163 to Asn-172.		•					*				•		•	-			Glu-18 to Lys-24,	Pro-68 to Gly-75,	Tyr-122 to Arg-136,	Pro-148 to Glu-158.						Ile-30 to Cys-36,	Pro-56 to Gly-65,	Glu-105 to Glu-110,
																		1336									1337		
											0							491 - 1009						•			2 - 613		
																		436		•	•	,				*	437	-	
											•.			,	•			853385									854051		
																		HSLDK59									HIMWDI41		
																		426									427		

																-													
																						·							
																	<u> </u>					×					_		
												•																-	
ş							-																						
Ŀ									_																				\dashv
H0341-1 S0358-1		_	H0539: 1, H0521: 1,	H0436: 1, L0779: 1,	.0366: 1 and H0506: 1	AR089: 6, AR061: 1	H0341: 1, H0393: 1	and H0266: 1.	AR089: 16, AR061: 4	L0748: 9, L0439: 5,	.0717: 4, L0659: 4,	.0663: 4, H0658: 4,	30045: 3, L0766: 3,	.0744: 3, L0749: 3,	.0758: 3, H0542: 3,	H0265: 2, H0556: 2,	S0040: 2, H0458: 2,	HO587: 2, H0486: 2,	H0318: 2, H0052: 2,	10687: 2, L0770: 2,	,0769: 2, L0646: 2,	,0666: 2, H0682: 2,	.0756: 2, L.0752: 2,	.0731: 2, L0608: 2,	10543: 2, H0423: 2,	10656: 1, H0402: 1,	S0418: 1, S0420: 1,	S0360: 1, H0619: 1,	H0392: 1, H0643: 1,
Tw-170 to Arg-175 H	1	_==	H	I	ī		Pro-65 to Asp-73, 1		A		ij	<u> </u>	<u> </u>	₫.	<u>i</u>	<u> </u>	SC	Ħ	耳	Ħ	<u> </u>	<u> </u>	<u>급</u>	٠ <u>٦</u>	直	耳	<u>SC</u>	<u> </u>	且
						1338			1339																				
						3 - 314	nama -		517-2																				
	ė.					438			439	6														ā					
		Ĭ.				856165			858497			•																	
						HFVHU73			HMUBJ80	-																		-,-	
				÷		428			429				:-	_															

	· · · · · · · · · · · · · · · · · · ·			
• ,			9	
	H0264: 1, H0488: 1, H0059: 1, T0042: 1, H0494: 1, S0150: 1, H0641: 1, H0529: 1, L0763: 1, L0638: 1, L0800: 1, L0648: 1,	L0662: 1, L0381: 1, L0375: 1, L0651: 1, L0376: 1, L0634: 1, L0788: 1, L0532: 1, L0665: 1, H0520: 1, H0519: 1, H0435: 1,	H0670: 1, H0539: 1, H0521: 1, S0028: 1, S0032: 1, L0743: 1, L0754: 1, L0747: 1, L0588: 1, L0601: 1, H0668: 1, S0276: 1 and H0352: 1.	AR061: 1, AR089: 1 L0803: 9, L0758: 7, L0439: 6, L0740: 5, L0766: 4, L0666: 4,
,				Asp-8 to Asp-20, Phe-43 to Arg-52, Ser-102 to Asp-107, His-109 to Asp-124,
		*		1340
				3 - 959
		7		440
				859297
*		·. ×		HE9ML74
				430

																			.*				•						
		10										· · · · ·	•				<u>.</u>	•	*					*		0	•		
.0663: 4, L0754: 4, .0747: 4, L0804: 3,	H0144: 3, L0750: 3,	,0756: 3, L0752: 3,	,0600: 3, S0003: 2,	.0455: 2, S0366: 2,	H0529: 2, L0659: 2,	.0809: 2, L0665: 2,	H0547: 2, H0672: 2,	H0539: 2, L0748: 2,	.0759: 2, L0591: 2,	.0485: 2, S0040: 1,	H0650: 1, H0656: 1,	S0212: 1, H0663: 1,	S0360: 1, H0351: 1,	10222: 1, S6014: 1,	H0392: 1, H0632: 1,	F0114: 1, H0427: 1,	.0021: 1, H0599: 1,	H0575: 1, H0581: 1,	S0049: 1, L0471: 1,	H0373: 1, H0510: 1,	S6028: 1, H0615: 1,	H0622: 1, S0036: 1,	F0067: 1, H0413: 1,	F0041: 1, S0002: 1,	S0426: 1, L0369: 1,	.0770: 1, L0769: 1,	.0761: 1, L0772: 1,	.0646: 1, L0794: 1,	.0774: 1, L0775: 1,
Phe-131 to Lys-136, I Pro-143 to Pro-149, I			<u>Þæd</u>				, Lu	. Н	H	1 —1		<u>, LO</u>		<u> </u>	111				,	<u>ъ</u>		<u> </u>			<u> </u>	H	. H		
Į.					•							101		*															
																Ţ.		_									, and a	: .	
										_	-						,	*							, <u>,</u>		.,		_
											-								•			:	<u>.</u>	<u> </u>					
				-÷										-								•			 -		•		

	*			
				-
L0655: 1, L0661: 1, L0647: 1, L0792: 1, L0793: 1, L0664: 1, H0682: 1, H0435: 1, H0659: 1, H0660: 1, H0651: 1, S0013: 1, H0436: 1, L0779: 1, L0608: 1, S0446: 1 and	AR089: 14, AR061: 10 L0803: 4, L0764: 2, L0794: 2, H0331: 1, H0574: 1, H0486: 1, H0318: 1, H0264: 1, L0804: 1, L0809: 1, L0665: 1, L0438: 1, H0684: 1, L0759: 1 and L0584: 1.	AR089: 1, AR061: 0 S0028: 2, H0135: 1, H0163: 1 and S0044: 1.	AR089: 0, AR061: 0 S0028: 4, S0390: 2, S0300: 1, H0031: 1, S0144: 1 and S0032: 1.	AR089: 1, AR061: 0 L0435: 2, H0624: 1, L0717: 1, S0214: 1, L0662: 1, L0766: 1, L0803: 1, S0380: 1,
	Pro-56 to Arg-67, Asp-86 to Gly-98.	Asn-6 to Lys-13.	Val-1 to Leu-7, Arg-49 to Trp-59.	Glu-33 to Pro-38.
	1341	1342	1343	1344
	1 - 300	12 - 257	270 - 611	2 - 547
<u>.</u>	441	442	443	444
	864092	866241	866272	867195
	HLQAJ01	HSLDP32	HPMEG40	HRADE27
	431	432	433	434

			-	*	
H0555: 1, L0754: 1 and L0756: 1.	AR061: 5, AR089: 3 H0250: 4, L0745: 4, L0746: 4, L0766: 3, L0666: 2, L0758: 2, H0556: 1, S0418: 1, H0486: 1, H0052: 1, H0252: 1, H0181: 1, H0116: 1, H0412: 1, S0210: 1, L0764: 1, L0794: 1 and H0672: 1.	AR089: 19, AR061: 3 H0544: 1 and S0036: 1.	AR061: 223, AR089: 167 H0013: 2, H0135: 1 and H0633: 1.	AR061: 1, AR089: 1 S0028: 2, S0045: 1, S6026: 1, H0231: 1, S0050: 1, H0617: 1, H0189: 1 and S0144: 1.	AR089: 1, AR061: 1 H0124: 5, T0040: 2, H0144: 2, S0342: 1, S0046: 1, H0550: 1, H0455: 1, H0486: 1, H0575: 1, T0110: 1, H0046: 1, H0266: 1,
	Ser-38 to Thr-46.			Pro-17 to Ala-22.	Thr-5 to Gln-52, Lys-121 to Ile-134.
	1345	1346	1347	1348	1349
	76 - 537	1 - 423	3 - 518	81 - 542	193 - 1014
	445	446	447	448	449
	869137	871062	871156	966128	875870
		нвосв27	HE8AM04	HSLHT48	HS2SH70
	435	436	437	438	439

,		
H0316: 1, H0616: 1, H0551: 1, T0041: 1, H0561: 1, L0438: 1, H0547: 1, S0152: 1, H0521: 1, H0555: 1, H0631: 1 and L0731: 1.	AR089: 414, AR061: 79 L0751: 2, H0341: 1, S0132: 1, H0550: 1, S0222: 1, H0431: 1, H0083: 1, S0314: 1, H0083: 1, S0314: 1, H0488: 1, H0413: 1, T0041: 1, S0150: 1, S0344: 1, L0662: 1, L0657: 1, L0663: 1, S0374: 1, H0519: 1, L0748: 1 and L0592: 1.	AR089: 53, AR050: 32, AR054: 28, AR051: 24, AR061: 19 L0439: 3, S0212: 2, H0052: 2, S0051: 2, L0805: 2, H0435: 2, H0624: 1, H0265: 1, H0686: 1, S0420: 1, S0045: 1, R069: 1,
		Lys-35 to Gln-40, Gln-61 to Lys-66, Ser-116 to Gly-121, Gln-192 to Ser-205.
	1350	1351
,	3 - 440	69 - 692
	450	451
	876157	878549
	HAOAE45	HELBA42
	440	441

			· ·
			*
H0581: 1, L0157: 1, T0010: 1, H0355: 1, H0266: 1, H0428: 1, T0041: 1, L0475: 1, H0130: 1, S0210: 1, S0002: 1, L0788: 1 and L0759: 1.	AR089: 10, AR061: 2 H0484: 2, H0052: 1 and H0478: 1.	AR089: 4, AR061: 0 H0305: 2, H0587: 1 and H0069: 1.	AR061: 4, AR089: 2 H0539: 5, L0758: 4, H0620: 3, L0809: 3, H0050: 2, S0002: 2, L0803: 2, L0805: 2, S0330: 2, L0754: 2, L0755: 2, L0605: 2, H0265: 1, H0556: 1, S0040: 1, H0341: 1, S0212: 1, S0110: 1, S0278: 1, H0645: 1, H0497: 1, H0013: 1, H0618: 1, H0581: 1, H0052: 1, H0644: 1, H0052: 1, H0024: 1,
	Gly-19 to Thr-24.	Gly-1 to Cys-6.	Ser-28 to Val-35, Arg-49 to Arg-57.
	1352	1353	1354
	1 - 564	3 - 431	28 - 669
*	452	453	454
	878791	879399	879640
	HSPBB15	HTAFF91	HETHB58
	442	443	444

S0022: 1, H0622: 1, L0142: 1, H0124: 1, S0344: 1, L0770: 1, L0761: 1, L0794: 1, L0774: 1, L0776: 1, L0656: 1, L0659: 1, L0789: 1, L0666: 1, L0665: 1, S0428: 1, H0519: 1, S0126: 1,	HU435: 1, HU355: 1, S3014: 1, S0028: 1, L0756: 1, L0777: 1, S0031: 1, H0445: 1 and L0596: 1.	AR089: 2, AR061: 1 H0251: 4, H0024: 2, H0341: 1, S0418: 1, H0015: 1, S0013: 1 and L0601: 1.	AR061: 4, AR089: 2 H0013: 4, L0740: 3, H0163: 2, L0768: 2, L0593: 2, H0624: 1, H0171: 1, S0003: 1, T0006: 1, L0776: 1, H0144: 1, H0547: 1, L0750: 1, L0759: 1 and L0592: 1.	AR089: 2, AR061: 1
		Pro-1 to Lys-12, Gln-29 to Arg-34, Asn-37 to Tyr-48, Asn-54 to Ser-63, Pro-68 to Leu-73, Asp-125 to Gln-135.	Pro-8 to Gly-17, Arg-22 to Ser-29.	
		1355	1356	1357
		93 - 533	3 - 500	68 - 316
		455	456	457
	- 00	880328	882939	839516
		HGBCU40	HE9PR39	HTEAF36
		445	446	447

_											-									- 17										
																										÷				
_								,															 _					*		
													. *						•											
																	*			. **										
: 14.	14,	11,	10,	•	~~~	•		. ~			^		•			-÷	 		^		~~	~~^	~^	~ <u>`</u>	·~^				~î.	~î
H0529: 16, S0358: 14	14, L0755:	0747:	.0752: 11, H0521: 1	30360: 8, L0662: 8	0659: 8, H0435: 8	L0649: 7	501:7	376: 6	637: 6	L0766: 6	295: 5	023: 5	380: 5	356: 4	10592: 4, H0586: 4	H0497: 4, H0604: 4	I0038: 4, L0772: 4	L0657: 4	S0374: 4, H0685: 3,	144: 3	10580: 3, H0253: 3	, H0620: 3	031: 3	488: 3	10641: 3, H0647: 3,	.0794: 3, L0664: 3,	H0593: 3, L0748: 3,	,0750: 3, L0596: 3,	H0294: 2, H0656: 2,	H0483: 2, H0664: 2,
16.	14, L	11, L	11, H	8, LO	8, HO	8, LO	7, LO	6, 80	6, LO	6, LO	6, HO	5, TO	5, SO	5, S0	4, H0	4, H0	4, LO	4, LO	4, HO	3, SO ₂	3, HO	3, H0	3, H0	3, H0	3, H0	3, L0	3, LO	3, 1.09	2, H0	2, H0
H0529	H0494:	.0665: 11, L0747	0752:	0360:	0659:	0439: 8,	.0754: 7, L0601:	10663: 6, S0376:	H0618: 6, L0637:	.0646: 6,	.0666: 6, H0295:	H0661: 5, T0023:	.0653: 5, S0380: 5	.0758: 5, S0356: 4	0592:	0497:	0038:	,0768: 4,	0374:	S0442: 3, S0444: 3	0580:	H0581: 3,	H0615: 3, H0031:	10617: 3, H0488:	0641:	0794:	0593:	0750:	0294:	0483:
Ē	工	ਹ	<u> </u>	<u> </u>	<u>i</u>	Ä	百	王	耳	ì	Ā	耳	<u>i</u>	Ä	田	耳	耳	Ä	<u>x</u>	Š	耳	耳	耳	耳	耳	ĭ	耳	ĭ	Ĭ.	H
											٠								•									•		
																													•	
_					<u>-</u>											-1	•							-	- 1		,_ -			
				-														•							-					
																				,										
	-											•			-	-	-8								-					
																					-									
						:				-											_									
_							_					111			-					-										
						•																								
														•											•					
								•												-							_			

_																						_			_	<u></u>				_
			•										-	- 0						-										
	,	٠																									٠			
				_				•			<u> </u>														·			<u> </u>		
5:2,	2:2	6: 2,	2: 2,	8: 2,	0:2,	9: 2,	2: 2,	2,	4:2,	3 : 2,	0:2,	6:2,	. 2,	8:2,	. 2,	. 2,	1 ; 2,	7:1,	‡ : 1,	8: I,	0:1,	6: 1,	l: 1,	9: 1,	4: 1,	7:1,	0: 1,	5: 1,	3: 1,	2: 1,
1067¢	H0397	H004	, H0012: 2,	H0688: 2,	2, H0030: 2,	2, H0059: 2,	10633: 2, S0422: 2,	L0771: 2,	H0144: 2,	10689	190E	990E	S0330: 2,	H047	L0749: 2,	L0759: 2,	H0543: 2, S0424:	, H0657:	, H0484:	,T0008:	H0370:	H0486: 1	L0021:	H0309:	10263: 1, H0234:	H0597:	H015	H0375:	H0033:	H003
: 2, F	: 2, F	9:2,1	9:2,1	3: 2, 1	3: 2,]	4:2,1	3:2,5	: 2, I	: 2, I): 2, F	3:2,]): 2,]	: 2, 8	5:2,]	F. 2, I	: 2, I	3:2,	5: 1, 1		_	•	1	7			•	l: 1,]	•	8: 1,]	<u>4: 1, 1</u>
S0354: 2, H0676: 2,	S0408: 2, H0392: 2,	H0409: 2, H0046: 2,	H0009: 7	H0083:	H0213:	10264:	H063	.0763: 2,	.0382: 2,	S0310: 2, H0689: 2,	HO658: 2, HO670: 2,	H0660: 2, H0666: 2,	S0328: 2,	H0696: 2, H0478: 2,	.0744: 2,	.0731: 2,	1054	H0556:	S0116: 1	H0662:	H0550: 1	H0587:	r0114:	H0318: 1	H026	H0596: 1	H0121: 1, H0150:	.0471: 1,	T0428:	H0644: 1, H0032:
	<u>, , , , , , , , , , , , , , , , , , , </u>		<u> </u>	<u> </u>	_==		_=	=		<u> </u>	_==		<u>LO</u>	_=				, -	<u></u>	<u> </u>	<u> </u>			_=	124	_==			.—.	=
		`											•																	
																						٠								
		-																-		_	1									<u> </u>
													٠		-			·												
																								•						
			-																											
																		-							_					
					٠																		-							
\mid			_														 -										<u></u>			
L	~-					سيند																		٠.						
L	· 																					<u> </u>						_		

H0672: 1, 10.103. 1, H0672: 1, 10.103. 1, H0607: 1, H0616: 1, H0607: 1, H0616: 1, S0440: 1, S0150: 1, S04002: 1, L0640: 1, L0770: 1, L0640: 1, L0764: 1, L0363: 1, L0764: 1, L0363: 1, L0776: 1, L0805: 1, L0776: 1, L0805: 1, L0776: 1, L0636: 1, H0693: 1, L0636: 1, H0693: 1, H0690: 1, H0684: 1, H0690: 1, H0684: 1, H0659: 1, H0684: 1, H0672: 1, S0152: 1, S0350: 1, H0648: 1, H0672: 1, S0152: 1, S0350: 1, H0522: 1, S0392: 1, L0751: 1, L0741: 1, L0757: 1, S0434: 1,	· · · · · · · · · · · · · · · · · · ·	
H0674: 1, 10105: 1, H0674: 1, 80036: 1, H0607: 1, H0616: 1, H0625: 1, 80466: 1, S0440: 1, 80150: 1, S0472: 1, 80144: 1, S0002: 1, L0640: 1, L0770: 1, L0776: 1, L0764: 1, L0363: 1, L0776: 1, L0363: 1, L0776: 1, L0655: 1, L0493: 1, L0655: 1, L0663: 1, 80052: 1, H0693: 1, H0647: 1, S0126: 1, H0689: 1, H0684: 1, H0659: 1, H0684: 1, H0659: 1, H0684: 1, H0659: 1, H0684: 1, R0672: 1, S0152: 1, S0350: 1,		
H0674: 1, 80036: 1, H0640: 1, H0616: 1, H0625: 1, 80466: 1, S0440: 1, 80150: 1, S0472: 1, 80144: 1, S0002: 1, L0640: 1, L0770: 1, L0761: 1, L0764: 1, L0761: 1, L0764: 1, L0774: 1, L0764: 1, L0778: 1, L0763: 1, L0658: 1, L0769: 1, L0658: 1, L0769: 1, L0658: 1, L0769: 1, L0659: 1, H0693: 1, H0690: 1, H0682: 1, H0690: 1, H0684: 1, H0659: 1, H0684: 1, H0672: 1,		
H0674: 1, H0163: 1, H0674: 1, S0036: 1, H0625: 1, H0560: 1, H0625: 1, S0466: 1, S0440: 1, S0150: 1, S0472: 1, S0144: 1, S0002: 1, L0640: 1, L0770: 1, L0761: 1, L0764: 1, L0774: 1, L0775: 1, L0774: 1, L0776: 1, L0805: 1, L0493: 1, L0809: 1, L0663: 1, S0052: 1, H0663: 1, H0690: 1, H0682: 1, H0689: 1, H0682: 1, H0689: 1,		
H0674: 1, 10019: 1, H0674: 1, 80036: 1, H0040: 1, H0616: 1, T0067: 1, H0560: 1, H0625: 1, S0466: 1, S0470: 1, S0150: 1, S0002: 1, L0640: 1, L0770: 1, L0761: 1, L0764: 1, L0774: 1, L0776: 1, L0363: 1, L0776: 1, L0655: 1, L0493: 1, L0655: 1, L0493: 1, L0655: 1, L0663: 1, S0052: 1, H0693: 1, H0647: 1, S0126: 1, H0690: 1,		
H0674: 1, R0105: 1, H0040: 1, H0616: 1, T0067: 1, H0560: 1, H0625: 1, S0466: 1, S0472: 1, S0144: 1, S0002: 1, L0640: 1, L0770: 1, L0761: 1, L0764: 1, L0363: 1, L0775: 1, L0375: 1, L0776: 1, L0805: 1, L0493: 1, L0636: 1, L0663: 1, S0052: 1, H0693: 1, H0547: 1,		
H0674: 1, 100103: 1, H0674: 1, S0036: 1, H0040: 1, H0616: 1, T0067: 1, H0560: 1, H0625: 1, S046: 1, S0472: 1, S0144: 1, S0002: 1, L0640: 1, L0770: 1, L0761: 1, L076: 1, L0774: 1, L075: 1, L0375: 1, L0806: 1, L0805: 1, L0493: 1, L0636: 1, L0663: 1, S0052: 1,		
H0674: 1, 80036: 1, H0040: 1, H0616: 1, T0067: 1, H0560: 1, H0625: 1, S0466: 1, S0440: 1, S0150: 1, S0472: 1, S0144: 1, S0002: 1, L0640: 1, L0770: 1, L0761: 1, L0764: 1, L0774: 1, L0775: 1, L0375: 1, L0806: 1, L0805: 1, L0493: 1, L0636: 1,		
H0674: 1, 100103: 1, H0040: 1, H0616: 1, T0067: 1, H0560: 1, H0625: 1, S0466: 1, S0440: 1, S0150: 1, S0472: 1, S0144: 1, S0002: 1, L0640: 1, L0770: 1, L0761: 1, L0764: 1, L0363: 1, L0364: 1, L0375: 1, L0806: 1, L0805: 1, L0776: 1, L0855: 1,		
H0674: 1, R0036: 1, H0040: 1, H0616: 1, T0067: 1, H0560: 1, H0625: 1, S0466: 1, S0440: 1, S0150: 1, S0472: 1, S0144: 1, S0002: 1, L0640: 1, L0770: 1, L0761: 1, L0764: 1, L0774: 1, L0364: 1, L0774: 1, L0806: 1, L0805: 1,		
H0674: 1, B0036: 1, H0040: 1, H0616: 1, T0067: 1, H0560: 1, H0625: 1, S0466: 1, S0440: 1, S0150: 1, S0472: 1, S0144: 1, S0002: 1, L0640: 1, L0770: 1, L0761: 1, L0764: 1, L0363: 1, L0364: 1, L0375: 1,		
H0674: 1, R0109: 1, H0040: 1, H0616: 1, H0067: 1, H0560: 1, H0625: 1, S0466: 1, S0440: 1, S0150: 1, S0472: 1, S0144: 1, S0002: 1, L0640: 1, L0770: 1, L0761: 1, L0764: 1, L0363: 1,		
H0674: 1, R0103: 1, H0674: 1, S0036: 1, H0040: 1, H0616: 1, T0067: 1, H0560: 1, H0625: 1, S046: 1, S0440: 1, S0150: 1, S0472: 1, S0144: 1, S0002: 1, L0640: 1, L0770: 1, L0761: 1,		
H0674: 1, 100103: 1, H0040: 1, H0616: 1, H0067: 1, H0560: 1, H0625: 1, S0466: 1, S0440: 1, S0150: 1, S0472: 1, S0144: 1, S0002: 1, L0640: 1,		
H0674: 1, 100103: 1, H0040: 1, H0616: 1, T0067: 1, H0560: 1, H0625: 1, S046: 1, S0440: 1, S0150: 1, S0472: 1, S0144: 1,		
H0674: 1, 50036: 1, H0040: 1, H0616: 1, T0067: 1, H0560: 1, H0625: 1, S0466: 1, S0440: 1, S0150: 1		
H0674: 1, S0036: 1, H0040: 1, H0616: 1, T0067: 1, H0560: 1,		
H0674: 1, S0036: 1, H0040: 1, H0616: 1,		
		•

PCT/US01/01239

WO 01/55301

											-		·					- ;											
	·							2437.2	,							-													
L0600: 1:								-	L0601: 2, H0618: 1,	H0085: 1 and H0024: 1.				•	AR061: 6, AR089: 2	H0457: 5, L0439: 4,	H0013: 3, H0244: 3,	H0266: 3, L0748: 3,	H0556: 2, H0052: 2,	H0040: 2, L0741: 2,	L0740: 2, L0747: 2,	L0759: 2, H0543: 2,	H0265: 1, S0356: 1,	H0580: 1, S0132: 1,	H0619: 1, S0222: 1,	T0082: 1, H0036: 1,	H0421: 1, H0046: 1,	H0009: 1, H0620: 1,	Т0010: 1, Н0083: 1,
		Leu-21 to Phe-27,	Gly-61 to Ala-68,	Ala-85 to His-91,	Asp-96 to Val-101,	Asp-117 to Ile-131,	Ala-155 to Ser-161.	Glu-1 to Gln-19,	Arg-58 to Pro-67,	Glu-78 to Phe-85,	Ser-104 to Arg-114,	Arg-121 to Lys-130,	Arg-135 to Thr-140,	Asn-159 to Ser-168.	Thr-12 to Ser-19,	Val-22 to Glu-32,	His-34 to Lys-43,	Glu-129 to Lys-134,	Phe-221 to Gln-226,	Pro-231 to Pro-236,	Lys-288 to Lys-299,	Glu-320 to Gln-327,	Thr-448 to Pro-455,	Thr-490 to Glu-495.	. •			-	
	1771	1772.						1358							1359			-											
	253 - 501	1 - 669						3 - 1085					•		362 - 1906			-											·
	871	872			•			458							459														
	839517	883195			-			883855						-	888844														
								HTLGW66		-8-					HPJDV95							•							
								448						-	449						_								

			·
H0179: 1, H0271: 1, H0416: 1, S0250: 1, H0168: 1, H0634: 1, H0551: 1, S0386: 1, T0042: 1, H0641: 1, S0344: 1, L0766: 1, L0776: 1, L0565: 1, H0539: 1, S0152: 1, H0478: 1, L0754: 1,	L0755: 1, H0707: 1, L0596: 1, L0605: 1, L0599: 1, H0542: 1, H0423: 1, H0422: 1 and H0506: 1.	AR089: 29, AR061: 15 L0742: 2, S0356: 1, S0358: 1, S0360: 1, H0617: 1, H0040: 1 and H0522: 1.	AR089: 5, AR061: 2 L0755: 6, H0521: 5, H0634: 4, L0771: 4, L0766: 4, L0759: 4, L0800: 3, L0774: 3, H0659: 3, L0748: 3, L0754: 3, H0171: 2, H0550: 2, H0587: 2, H0264: 2, L0764: 2, L0768: 2, L0803: 2, L0775: 2, L0817: 2,
		Ser-14 to Trp-22.	Arg-147 to Asn-153, Arg-165 to Glu-174, Phe-217 to Lys-222, Ala-306 to Ser-313.
		1360	1361
-	-	48 - 533	131 - 1120
		460	461
		889436	909703
		HCROF75	HDPAP15
		450	451

Γ						·														-,-	_									.]
																													•	
									 -		÷			_													_ <u>·</u>			\dashv
						٠																				,				
																							٠							
_									_						, Y							,								
	. •	•	•	^						•		·ـــــــــــــــــــــــــــــــــــ	·^	•	^			•	•	•	•	•	•	•			•	•	•	
.0809: 2, L0744: 2	24: 1	02: 1	83: 1	41:1	58: 1	70:1	74:]	35: 1	75: 1	46: 1	81:1	51: 1	46: 1	24: 1	39: 1	31:1	32: 1	38: 1	44: 1	51: 1	24:1	06: 1	53: 1	59: 1	91:1	53: 1	26: 1	30:1	43: 1	45: 1
107	.0779; 2, H0624;	H0265: 1, T0002:	, H0583	S0116: 1, H0341:	, S0358:	, H0370:	, H0574:	H0635:	1, H0575:	S0346:	H0581:	H0251:	H0046:	, H0024:	H0039:	H0031:	H0628: 1, H0032:	, H0038:	, S0144:	L0761:	108	L0806: 1	L0653:	L0659:	L07	L0663:	S0126:	1, \$0330:	H0696: 1, L0743:	.0740: 1, L0745:
9.2	9.2	5: 1,	4: 1,	6: 1,	2: 1,					4: 1,	8: 1,	(2:1)	3: 1,	7: 1,	4: 1,	2: 1,	8: 1,		~~	-	٦,		-	Ę,		<u> </u>	٦,	£,	6: 1,	0: 1,
080	L077	H026	S0134: 1	S 011	S0212:	H0329:	H0455: 1	H0632:	H0156: 1	H0004:	H0318:	H0052: 1	H0263: 1	C0157:	H0014:	H0622:	H062	S0364: 1	H0494:	S0142:	L0772:	L0651:	L0805:	L0655:	L0783:	L0792:	H0593:	H0672:	590H	L074
														. 		پوس.							L	<u> 1</u> .						
																			0.											
																•					•						•	•		
-		•																					 -							
																												٠		
-			·····																									: <u> </u>		
																												1		
											,								_											
																			٠											
								-					•																	
-														,					-						_					
														Ţ	_														1	
		•																												
																							• .							
 						_													-				_							\dashv

							<u>· </u>	-			-																		
1					•																								
						•						-							,		•								
	•			٠																									
																													, 0
	8		+	9 ,	<u> </u>	8-											Ad						÷				.	٠,	
: 1,	: <u>1</u>	5: 1,	7/0:	061:	LU/66: 10, LU/58: 10,	.6,	. 5,	5: 4,	4,:	ώ.	. 3°	<u>ښ</u>	2,	0:2,	2,	7:2,	.,2	2; 2,	1: 2,	. 2,	: 2,	. 2,): 1,	. 1,	: 1;	0: 1,	6: 1,): 1,	3: 1,
.0746: 1, L0747:	.0750: 1, L0757:	20758: 1, H0445: 1	S0026: 1 and S02/6:	AR089: 10, AR061:	0, 1.07	.0755: 8, L0731: 6,	H0616: 5, L0740: 5,	H0494: 4, H0696: 4	L0752: 4,	.0757: 4, S0358:	H0038: 3, L0770: 3,	.0775: 3, S0328: 3	.0747: 3, H0662:	HO638: 2, HO580: 2,	S0280: 2, H0052: 2	H0266: 2, T0067: 2,	J0809: 2, L0666: 2,	S0126: 2, H0435: 2,	H0648: 2, H0521: 2,	.0744: 2, L0748: 2,	L0749: 2,	.0750: 2, L0684:	H0423: 2, S0040:	, Н0657:	1, S0212:	H0125: 1, H0370:	l, H0486:	, H0250:	H0098:
6: 1,	00: 1,	38: 1,	.0: 	89: 1	1 :00/	55:8,	16:5,	94: 4,	,0756: 4,	57: 4,	38: 3,	75:3,	17:3,	38: 2,	30: 2,	56: 2,	9:2,	6: 2,	48: 2,	14: 2,	.0751:2,	50: 2,	23: 2,	4: 1,		25: 1,	87: 1,	9: 1,	.0021: 1,
1707	107	1.07	200	ARO ;	3	107	90H	H04	107	107	HOOH	L07	107	H06	S028	H02	1.08 1.08	S012	90H	L07	107	107	H04	S0134:	H0341:	H01	H0587:	T0109: 1	007
												•												•					
				ily-12																									
				Lys-6 to Gly-12.																									
	-			Lys																							_		
				1362																						•			
			\perp							·-···																	<u>.</u>		
			- 1	1 - 112												•													
_				261									,		-														
				462																									
	:	•••		71																									
				896571													·		•					<u>.</u>					
				H34									. (
				HTGDH34																									
-			\dashv										<u>.</u>																
				452																									

*	-	
		-
S0010: 1, H0581: 1, H0421: 1, H0251: 1, L0471: 1, H0057: 1, H0083: 1, H0428: 1, S0364: 1, S0366: 1, H0090: 1, H0412: 1, H0022: 1, S0422: 1, S0002: 1, L0764: 1, L0771: 1, L0662: 1, L0771: 1, L0662: 1, L0378: 1, L0774: 1, L0653: 1, L0776: 1, L0657: 1, L0659: 1, L0657: 1, L0659: 1, L0663: 1, H0547: 1, H0519: 1, H0547: 1, R0519: 1, H0539: 1, S0378: 1, S0136: 1, H0445: 1, L0759: 1, H0445: 1, L0366: 1, H0668: 1, S0026: 1, H0668: 1, S0026: 1,	AR089. 1 AR061. 1	4, L0748: 3,
	Ile-94 to Gly-99.	
	1773	. 1000
l · · · · · · · · · · · · · · · · · · ·	337 - 774	. 641 - 666
	873	ř
	913378	170417
	нринно	לאוויות חו
	453	ì

and the second s		2.9												4					
	114208,	114208,	120620,	120620,	120920,	134370,	134370,	134370,	134580,	145260,	150310,	150310,	179820,	191045,	600105,	600759,	601494,	601975	
	1q32			,						*						,		ilia.	
L0764: 2, L0751: 2, H0295: 1, H0662: 1, H0240: 1, H0241: 1, H0675: 1, L0717: 1, S0222: 1, H0441: 1, H0036: 1, H0253: 1, T0023: 1, S0038: 1, L0662: 1, H0547: 1, H0555: 1, L0743: 1,	AR089: 3, AR061: 2	L0754: 27, S0003: 22,	L0439: 14, L0803: 13,	L0758: 13, L0794: 12,	3	L0805: 10, L0740: 8,	L0747: 8, L0749: 8,	L0779: 8, L0770: 7,	H0521: 7, S0360: 6,	L0756: 5, H0013: 4,	H0553: 4, L0776: 4,	L0438: 4, L0757: 4,	S0354: 3, H0328: 3,	H0615: 3, H0144: 3,	L0755: 3, H0543: 3,	H0556: 2, H0657: 2,	H0661: 2, H0580: 2,	H0486: 2, S0474: 2,	H0421: 2, H0050: 2,
	Val-6 to Arg-16,	Asp-25 to Thr-34.							•						-				
	1364													,			•	a .	
4	3 - 1715						ion a				•								
	464			•						*			·						
	914973	- rii	,												- 10	•			
	HDPVG08									,			•						
	454			-					i						-				

																	<u>-</u>		•					0			•	
		·										3. *									<u></u>							
·	<u> </u>	2			•				.					<u></u>		_	_					<u></u>	_					
	2, T0041:	îdî	2, L0804:	84: 2, L0659: 2,	17: 2, L0519: 2,	52: 2, S0126: 2,	L0745: 2, L0750: 2,	J0780: 2, L0605: 2,	H0395: 1, S0114: 1,	H0664: 1, H0638: 1,	48: 1, S0418: 1,		H0393: 1, H0613: 1,	H0587: 1, H0643: 1,	H0574: 1, H0250: 1,	H0069: 1, S0346: 1,	S0049: 1, H0052: 1,	H0596: 1, H0123: 1,	J0471: 1, S0388: 1,	S0214: 1, H0428: 1,	H0030: 1, H0617: 1,	H0032: 1, H0673: 1,	.0455: 1, H0598: 1,	H0634: 1, H0616: 1,	H0264: 1, H0413: 1,	H0059: 1, H0131: 1,	H0641: 1, S0210: 1,	H0529: 1, L0763: 1,
H0622: H0628:	H0038:	106.3	L0662:	L0784:	L0517:	S0052:	L07	L07	H03	90H	S0348:	S04	H03	H05	H05	H00	S00	H05	104	S02	HOO	00H	L04	H06	H02	HOO	H06	H05
																	•						٠					
																												Ÿ
			•									•				<u></u>						<u> </u>						
				<u> </u>		•								<u> </u>		,				,					-			•
					_	-						,						 -								-		
							·								-			. ·		•								

				,	
.0761: 1, L0764: 1, .0771: 1, L0521: 1, .0649: 1, L0650: 1, .0661: 1, L0384: 1, .0809: 1, L0647: 1,	ت سُوند شدهد		H0707: 1, L0608: 1, L0595: 1, S0026: 1, H0423: 1, L0697: 1, S0424: 1 and H0506: 1.	S0001: 2, H0624: 1, H0689: 1 and S0028: 1.	L0741: 4, L0744: 4, H0556: 3, S0344: 3, L0763: 3, L0766: 3, L0743: 3, L0754: 3, L0747: 3, L0758: 3, L0596: 3, S0212: 2, H0662: 2, S0358: 2,
аааааа	<u>TYNER</u>	<u>on Hut</u>	ᄑᄀᄑᅑ	Gly-11 to Lys-20, His-41 to Cys-47, H	<u>_ </u>
				1365	1366
				2 - 886	2 - 1345
·			-	465	466
				916095	916445
·				HFXDW32	HSSCY03
·				455	456

		·		
£	*			
S0045: 2, S0140: 2, H0370: 2, L0483: 2, L0769: 2, L0774: 2, H0521: 2, L0748: 2, L0759: 2, S0114: 1, H0255: 1, H0306: 1, S0046: 1, H0619: 1,	S0278: 1, S0280: 1, H0309: 1, T0010: 1, S6028: 1, H0424: 1, H0644: 1, S0036: 1, H0135: 1, H0272: 1, H0412: 1, H0059: 1,	H0560: 1, H0561: 1, H0131: 1, H0647: 1, H0649: 1, L0770: 1, L0761: 1, L0776: 1,	H0144: 1, H0672: 1, H0576: 1, S3014: 1, S0027: 1, L0749: 1, L0755: 1, S0026: 1, H0665: 1, S0196: 1 and H0506: 1.	AR061: 2, AR089: 1 S0028: 4, S0001: 2, S0282: 2, S0278: 2, S0050: 2, H0416: 1, H0027: 1, S0038: 1, S0052: 1, S0053: 1, H0684: 1 and S0044: 1.
	.*			Lys-20 to Ile-29, Arg-46 to Pro-59, Ile-86 to Asn-93, Phe-115 to Asn-120.
	• .			1367
				139 - 615
	·			467
				916758
				HFXF149
				457

							•											•				_	_						
							_																						
																													_
Ì								•											•										
															-							•							
AR089: 15, AR061: 11	L0803: 16, S0358: 2,	H0031: 2, S0144: 2,	.0770: 2, L0804: 2,	.0439: 2, L0780: 2,	S0116: 1, S0360: 1,	H0441: 1, H0431: 1,	H0331: 1, H0618: 1,	H0544: 1, L0471: 1,	H0510: 1, S0318: 1,	H0264: 1, L0769: 1,	.0783: 1, L0809: 1,	.0790: 1, L0438: 1,	C0355: 1, L0751: 1,	.0779: 1, L0777: 1 and	.0758: 1.	AR061: 2, AR089: 1	L0595: 6, H0069: 4,	H0521: 4, L0777: 3,	H0663: 2, H0620: 2,	H0494: 2, L0646: 2,	.0764: 2, L0649: 2,	S0152: 2, L0592: 2,	02: 1, S0040: 1,	H0341: 1, H0341: 1,	H0305: 1, H0305: 1,	H0580: 1, H0645: 1,	L0717: 1, H0431: 1,	H0587: 1, T0040: 1,	H0635: 1, H0575: 1,
AR	<u>ន</u>	100 1100	107	10 4	S01	H04	H03	H05	H05	H02	1.07	L07	<u>1</u> 03	L07	L07	AR(<u> </u>	HOS	90H	H04	L07	S01	100	90H	90H	H05	L07	H05	回
				•			Ţ.									Ser-2 to Gln-22,	Pro-94 to His-110,	Phe-167 to Ala-172,	Leu-261 to Gly-268.		•						·.		
1368						•										1369													
33 - 776							-						•			896 - 2188													
468																469													
917526								-								917758		-											
HTLGH72 917526																HSUAE63													
458																459											3.		

																							_	7	-				
														-					,										
<u>.</u>					,				<u> </u>					•						- -									
																												•	
																			•										o ·
1,	—î	0: 1, H0292: 1,	<u></u>	0: 1, S0344: 1,	`	`	· 🖵	3: 1, L0759: 1,	<u>_</u>	٠	2: 1.	AR089: 233, AR061:		L0803: 7, L0766: 3,	.0774: 3, L0659: 3,	.0745: 3, L0791: 2,	.0608: 2, S0356: 1,	l: 1, S0376: 1,	2: 1, H0013: 1,	l: 1, H0575: 1,	H0596: 1, H0457: 1,	7: 1, S0003: 1,	0: 1, H0130: 1,	` == î	5: 1, H0529: 1,	Ţ	1,	5: 1, L0776: 1,	3: 1, H0520: 1,
S0010:	H0012:	H0290:	H0615:	H0560:	L0521:	L0791:	H0134:	L0753:	L0591:	H0136: 1	H0422:	AR08	20	T080	L0774	L0745	T0608	S0354:	S0222:	L0021:	H059(L0157: 1,	H0560:	H0646: 1	S0426:	L0641:	L0775:	L0805:	L0658:
	de in			St.			•					His-6 to Gly-16.					-		•				-						
												1370				,					•0								
												1400 - 606																	
						-						470																	
						•						918920															-		
												HAPTQ56																	
				8								460										١.							

				· · · · · · · · · · · · · · · · · · ·	
					-
H0670: 1, S0330: 1, S0136: 1, H0521: 1, H0522: 1, H0555: 1, S0037: 1, S0206: 1, L0779: 1, L0759: 1, L0684: 1, S0192: 1 and S0412: 1.		AR061: 1, AR089: 1 H0305: 4, S0028: 3, H0589: 1, S0045: 1, H0416: 1, H0576: 1 and S0390: 1.	AR061: 26, AR089: 21 S0031: 2 and S0044: 1.	AR089: 3, AR061: 3 L0748: 9, H0013: 1, S0346: 1, H0090: 1, H0591: 1 and L0600: 1.	AR050: 61, AR054: 60, AR051: 49, AR089: 9, AR061: 2
	Gly-1 to Gly-20, Phe-27 to Val-34, Thr-70 to Lys-75, Pro-95 to Ala-101, Ile-162 to Are-172.		Val-6 to Met-12.	Gln-10 to Arg-15, Tyr-31 to Ser-45, Asn-59 to Thr-67, Glu-74 to Arg-79, Ser-137 to Lys-144, Pro-162 to Glu-167, Ser-213 to Gly-221, Ile-261 to Lys-267.	Glu-3 to Ser-13, Asp-74 to Glu-79, Ala-92 to Ser-97,
	1774	1371	1372	1373	1374
	1 - 726	2 - 652	2 - 376	3 - 1100	45 - 467
· ·	874	471	472	473	474
	919863	919034	920435	921076	921365
		HNFIF54	HSDFF02	HE8NS06	HASBA77
		461	462	463	464

· · · · · · · · · · · · · · · · · · ·											-			
·														
*		•											-	
	·	<u> </u>			· · · · · · · · · · · · · · · · · · ·	ب خد		أبحدت						
									*			٠		
	· · ·								•					
		<u> </u>					-7							
ຕົ້າດ້າ	ം ചെയ്യ്					. 5	1, 8: 1.	2	4,	ورون			• _	ا ر
L0804: 3, L0748: 3, 20749: 3, S0196: 3, 10530: 2, H0413: 2, 20777: 2, H0686: 1, 10114: 1, H0341: 1	93: 1 71: 1 61: 1	1, L0805: 1, 1, L0740: 1, 1, L0758: 1, 1 and H0543		•	. '	2, AR061:	10074: 3, H0014: 1, S0027: 1 and S0028:	4, AR061:	L0748: 4, L0758: 4,	54: 3 53: 2	16: 1	78: 1,	22: 1 86: 1	74:1
L0804: 3, L0748: 20749: 3, S0196: 3 H0530: 2, H0413: 2, 20777: 2, H0686: 1	, H0393; , H0071; , H0561; , L0794;	, L0805: , L0740: , L0758:				2, AI	, Ho	4, A	Ö,	H0457: 3, L0754: S0418: 2, H0253:	H0052: 2, S0116:	, S0278:	l, S0222: 1	1, mo460 1, S0474:
9: 3, 0: 2, 7: 2,	7	3: 1; 1; 1; 1; 1; 1; 1; 1; 1; 1; 1; 1; 1;				99.	/4: 3 7: 1 a	66	48: 4	% % 2, %	2,		∺ ; -i ;	
L0804: L0749: 3 H0530: 2 L0777: 2	H0638: H0175: H0321: L0769:	L0803: L0790: L0747: S0260:				AR089:	100	AR089:	107	1045 1041	1005	\$0356: 1	H0261: 1	T0082:
	<u> </u>	ннни				4	<u> </u>	4		ਜ ਨ	111	S	<u> </u>	<u> </u>
-125			71,	118,	-164 -175									_
Ala			₽ 18 18 18	Ala.	Leu Val			er-16			,			-
14 to	10 mm 2 mm		6 to	4 to . 36 to	30 to 68 tc			toS						. 1
His-114 to Ala-125.			Asp-66 to Glu-71,	Ala-84 to Ser-89, His-106 to Ala-118,	Tyr-130 to Leu-164, Leu-168 to Val-175.	1	-	Gln-8 to Ser-16		-				•
144	<u> </u>		1	<u>4 111</u>	<u> </u>	-		-		<u>-</u>	•			2
			1775			1375		1376			-			
	-1					- i		-						
	٠	,	588		•	-51		892		•				
			61 -			449		107 -						
4			 					_				<u>-</u>		
			875	•		475		476		٠				
<u>'</u>		# 1,70 - 1 - 1 - 1 - 1					<u>اية سيخ</u>	·			•			
			921366			921831		921948						
	 	-T	92		(_								
						HSKDP26		HMTAY52						
						SKD SKD		MTA						
			<u></u>			Ħ		田				1		
						465		466						
بيبيب	· · · · · · · · · · · · · · · · · · ·	<u> </u>				4		4						

		$\overline{}$
	159	
H0057: 1, S0050: 1, H0594: 1, H0213: 1, H0553: 1, H0628: 1, H0617: 1, H0040: 1, H0207: 1, H0633: 1, L0763: 1, L0770: 1, L0642: 1, L0796: 1, L0642: 1, L0789: 1, L0665: 1, S0052: 1, H0144: 1, H0539: 1, H0518: 1, S0152: 1, L0777: 1, L0750: 1, L0777: 1, L0750: 1,	2, AR061: 2 : 1, H0435: 1, 1, H0521: 1, 1 and L0603: 1. 15, AR061: 7 7, L0759: 6, 4, L0748: 4, 4, L0749: 4,	L0662: 3, H0413: 2,
	Asp-18 to Leu-23, Asp-29 to Phe-34, His-45 to Asn-52, Gln-64 to Tyr-70, Thr-125 to Arg-131, Glu-133 to His-140, Glu-187 to Ile-195, Asn-224 to Phe-229 Gly-4 to Glu-10.	-
	1377	
	100 - 789	
•	478	
	922453	
	HSDJG01	
	467	

			•			
				-		
					·	·
•				Ì		
	•		•			4
					•	
. 170	*******	; * * * * * * * * * * * * * * * * * * *	"			•
	` எள்ளினின்,	പ് ക് പ് പ്	L0485: 1, H0667: 1, S0196: 1 and	R061: 5, AR089: 1 H0253: 11, L0439: 6, 0794: 4, L0809: 4,	ກິ ຕິ ຕິ −ີ −	$\frac{1}{1}$,
H0529: 2, L0805: 2, H0672: 2, L0758: 2, S0040: 1, L0005: 1, S0360: 1, S0045: 1, H0581: 1, H0015: 1,	03: 28: 71:	93: 78: 47: 55:	85: 3 67: 96: 1	AR061: 5, AR089: H0253: 11, L0439: L0794: 4, L0809: 4,	93: 7 83: 7 41:	S0362: 1, H0510: 1, H0181: 1, L0769: 1, L0542: 1, L0789: 1, H0187: 1, L0743: 1, L0779: 1 and L0777
2, L0805: 2, L0758: , L0005: , S0045: 1, H0015:	S0003: H0628: L0769: L0771:	H0693: S0378: L0747: L0755:	L0485: H0667: S0196:	L 1, 1	.0758: 4, H0618: .0766: 3, H0393: .0803: 2, L0783: .0438: 2, H0341: .0420: 1, S0358:	30362: 1, H0510: 40181: 1, L0769: L0542: 1, L0789: H0187: 1, L0743: L0779: 1 and L07
2,2,2,2,4	`ਜੀਜੀਜੀਜੀ	ゴーゴゴ		3: 1.	4,60,60,6	
H0529: H0672: S0040: S0360: H	H0083: L0142: 1 H0090: L0667: 1	L0790: H0519: L0745: L0777:	L0731: S0026: S0242: H0543:	AR061: H0253 L0794:	L0/58: 4, L0766: 3, L0803: 2, L0438: 2, S0420: 1	S0362: H0181: L0542: H0187: L0779:
田田のの田田		3 2 2 2	<u> </u>	A # 3 ;	32228	SHUHU
		•				
					* .	
		•				
()		·				31
		X				*
		· · · · · · · · · · · · · · · · · · ·				
				1379		,
				=		
				- 960		
•				-		
· · · · · · · · · · · · · · · · · · ·				1		····
			•	479		
				929948		,
				929		
		:		9		
				AB	0	
				HTLAB16		
				<u> </u>		
			`	469		
				14		

AR089: 0, AR061: 0 H0255: 4, H0254: 1, H0638: 1, H0587: 1, S0250: 1, H0617: 1, H0547: 1, H0519: 1, S0032: 1, L0591: 1, H0665: 1 and H0216: 1.		H0547: 3, L0750: 3, L0752: 3, L0731: 3, H0624: 2, H0484: 2, H0549: 2, H0497: 2, H0486: 2, H0052: 2,	` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `	H0013: 1, L0738: 1, H0050: 1, H0012: 1, H0622: 1, T0023: 1, H0087: 1, T0067: 1, H0494: 1, S0142: 1, S0344: 1, L0763: 1, L0769: 1, L0768: 1,
Glu-12 to Arg-29, Gly-62 to Phe-69.				
1380	1381			
2719 - 1634	1 - 720			
480	481			-
930431	931615			
HOHCW42 930431	HCHNX75			
470	471			

		·
L0803: 1, L0650: 1, L0775: 1, L0805: 1, L0776: 1, L0655: 1, L0657: 1, L0658: 1, L0636: 1, L0384: 1, S0052: 1, H0144: 1, S0374: 1, H0519: 1, S0328: 1, H0696: 1, L0439: 1, L0751: 1, L0754: 1 and L0753: 1.	AR061: 10, AR089: 6 H0370: 13, H0620: 7, H0556: 4, L0794: 4, L0617: 3, H0251: 3, H0144: 3, L0438: 3, L0439: 3, L0752: 3, H0265: 2, S0358: 2, S0278: 2, H0486: 2, T0042: 2, S0210: 2, L0518: 2, L0666: 2, H0684: 2, H0134: 2, H0555: 2, L0743: 2, H0555: 2, L0743: 1, S0116: 1, H0484: 1, S0420: 1, H0208: 1, H0052: 1, H0012: 1, S06050: 1, H0015: 1,	r^ _^
	Ser-82 to Gly-87.	
	1382	
	1342 - 374	
	482	
	933093	
	HBCBA92	
	472	

H0100: 1, S0464: 1, S0142: 1, L0640: 1, L0763: 1, L0773: 1, L0662: 1, L0768: 1, L0807: 1, L0382: 1, L0789: 1, H0519: 1, S0330: 1, S3014: 1, L0747: 1, L0758: 1, H0216: 1, H0542: 1 and H0543: 1.	AR061: 7, AR089: 4 L0777: 8, H0046: 3, H0263: 2, L0803: 2, L0804: 2, S0360: 1, S0045: 1, H0619: 1, H0642: 1, H0013: 1, H0244: 1, H0039: 1, H0591: 1, L0641: 1, L0766: 1, L0517: 1,	AR061: 5, AR089: 2 H0556: 2, L0770: 2, H0395: 1, S0040: 1, H0657: 1, H0194: 1, H0024: 1, L0667: 1, L0766: 1, H0521: 1, L0740: 1, L0779: 1 and L0588: 1.	AR089: 13, AR061: 6 H0556: 2, L0770: 2,
	Arg-11 to Arg-16, Gln-34 to Arg-40, Ser-119 to Gln-126, Lys-147 to Gly-157.	Glu-9 to Gly-14, Pro-28 to Cys-35.	
	1383	1384	1385
	3 - 608	1 - 960	3 - 533
,	483	484	485
	933110	933670	933671
	HHEJI31	HTXNN68	HWWFW06 933671
	473	474	475

		·	
H0395: 1, S0040: 1, H0657: 1, H0194: 1, H0024: 1, L0667: 1, L0766: 1, H0521: 1, L0740: 1, L0779: 1 and L0588: 1.	AR089: 1, AR061: 0 H0624: 1 and S0028: 1.	AR061: 10, AR089: 10 H0519: 1 and S0037: 1.	AR089: 17, AR061: 2 H0521: 5, L0759: 4, S0358: 3, L0757: 3, S0046: 2, H0494: 2, L0662: 2, L0740: 2, H0663: 1, H0638: 1, S0132: 1, H0549: 1, H0586: 1, H0590: 1, H0524: 1, H0083: 1, H0551: 1, H0059: 1, L0775: 1, L0776: 1, L0775: 1, L0438: 1, H0547: 1, L0438: 1,
	Gln-21 to Trp-32, Lys-81 to Leu-86, Pro-100 to Cys-107.	Ser-1 to Thr-7, Asp-41 to Cys-50, Glu-53 to Gly-61, Asn-89 to Glu-96, Glu-113 to Gln-119	Phe-10 to Lys-15, Glu-108 to Gly-113, Pro-133 to Lys-142, Glu-152 to Thr-159, Val-196 to Glu-201, Val-216 to Tyr-221.
	1386	1387	1388
· -	3 - 338	113 - 766	237 - 899
	486	487	88 8
	934771	934819	937820
	HE2SY77	HSHCO49	HMUBI13
	476	477	478

		• .	-					•		
			·							
	- -									
,							_			··
L0755: 1, S0434: 1, L0596: 1, L0604: 1, H0667: 1, H0543: 1 and	AR089: 1, AR061: 1 L0769: 8, L0766: 7, L0771: 6, L0806: 6, H0253: 5, H0135: 4,	L0741: 4, L0750: 4, H0295: 3, L0774: 3, L0805: 3, L0439: 3,	L0751: 3, L0777: 3, L0755: 3, L0731: 3, H0392: 2, 1,0471: 2	ົດໂດ	H0583: 1, H0484: 1, L0617: 1, S0045: 1,	S0278: 1, H0438: 1, H0013: 1, H0706: 1,	H0618: 1, H0581: 1, H0544: 1, H0046: 1,	H0622: 1, H0124: 1,	-, -,	L0800: 1, L0794: 1, L0803: 1, L0804: 1, L0650: 1, L0775: 1,
	Leu-15 to Leu-24, Pro-42 to Asp-54, Ala-123 to Gin-139, Leu-143 to Ala-148,	Arg-165 to Asp-170, Arg-176 to Ser-183, Gly-211 to Thr-230,	Ser-259 to Asp-268, Gly-309 to Gly-319, Val-326 to Ile-341	Pro-359 to Phe-373, Asp-382 to Asp-392.	4					
	1389									
	777 - 1952						•			-
	489									
	938766			<u>. </u>		·	•			,
	HBXGL55					-	-			
	479				•					

Γ							_			<u> </u>																				
																		·		,										
																		•				-								
													_			-					•				-	*				-
								٠																						
				· 								.r		100							· —-									{
-	^ +	. T	.	. 1,	604: 1	89: 2	3: 2,	.1,	3: 1,	: 1 ,	l: 1,	 	 	Ŧ.	<u></u>	 	. <u>.</u>	: 1 and		89: 1	9:2,	<u></u>	2: 1,	l: 1,	1.	`.T:	: 1,	: 1,	. <u>.</u>	<u></u>
1.0636:		70/89	S0126: 1, H0522:	, L0752:	and L0604:	5, AR089:	H0643: 2, L0803: 2,	S0452: 2, T0049:	H0013:	, H0581	, H0271:	l, S0422:	L0766: 1	L0607:	H0693:	, S0380:	L0777	S0011:		1, AR089:	L0777: 3, L0769: 2,	, H0592:	1, H0492:	H0041	, H0038:	, S0002:	l, L0761:	I, L0794:	, L0774:	.0664: 1, L0748:
9.1	,	3: 1, 1	6: 1, I	9: 1, 1	3: 1 a	1	543: 2	2:2,7		_	$\vec{-}$			<u>`</u>	Ţ,	-	_	_		ſ	77: 3,	2: 1, 1	H0586: 1,			_	1:1,1			4: 1,
T.0659: 1		8 2 2 1	S012	L0779: 1	L0753: 1	AR061:	HOK	S045	H0580:	H0156:	H0179:	H0040:	L0369: 1	L0655:	L0791:	H0670:	H0579:	L0752:	H0653:	AR061:	15 15 16 17	S0132: 1	H058	H0004:	H0606:	H0264:	L0371: 1	L0646: 1	L0766: 1	1000
									-		•								-											
															•					er-12.										
												i								Thr-4 to Ser-12										i
											_									THE										
						1390														1391								٠		
-			-75			ω,			-			· .					-			2		<u>. </u>								
		•				1 - 1053					,	•			:		•		•	1-612	-					.*				
-										-	<u></u>	· . · · ·	•			-														
			. •			490					٠									491										
						940254		•			1.		,							942860						-				
						_	_		·											$\overline{}$									-	
						HAFAH26														HARMG23			•	.,	•					
						480														481					- *- -					

L0751: 1, L0750: 1 and L0779: 1.	AR061: 2, AR089: 2 L0766: 2, L0740: 2, S0356: 1, H0415: 1, H0598: 1, L0803: 1, L0774: 1, L0518: 1, H0539: 1, L0749: 1, L0779: 1 and L0777: 1.	AR061: 1, AR089: 1 H0619: 1, H0549: 1, H0486: 1, H0051: 1, S0250: 1, H0561: 1, S0428: 1, H0144: 1, H0539: 1, L0731: 1, L0592: 1, L0366: 1 and H0667: 1.	AR089: 1, AR061: 0 H0624: 1, H0013: 1, L0471: 1, S0250: 1, H0038: 1, H0100: 1, T0042: 1, S0150: 1, L0438: 1 and L0592: 1.	AR054: 1, AR050: 1, AR089: 1, AR061: 1 S0028: 3, S0222: 2, L0105: 2, S0050: 2, S0390: 2, S0260: 2,
	Val-18 to Lys-23, Arg-158 to Trp-167, Ser-176 to Ser-185, Gly-200 to Tyr-207, Pro-216 to Trp-221, Val-257 to Ser-266, Ile-304 to Val-316, Pro-319 to Thr-325, Thr-350 to Ser-358.	Tyr-22 to Gly-40, Glu-56 to Glu-66.		Arg-1 to Gly-6, Thr-74 to Ser-79, Pro-88 to Arg-96.
	1392	1393	1394	1395
	2 - 1138	1506 - 145	2 - 667	190 - 1047
	492	493	494	495
	943224	949245	950713	950717
×	HOFMV44	HE9CJ28	HE8AZ89	HFXKW94
	482	483	484	485

		×
H0344: 1, H0381: 1, S0282: 1, H0618: 1, S0051: 1, S6028: 1, H0271: 1, H0383: 1, H0264: 1 and S0038: 1.	AR061: 1, AR089: 1 L0439: 5, H0529: 3, L0759: 3, S0360: 2, H0024: 2, L0766: 2, L0804: 2, L0779: 2, L0362: 2, H0556: 1, H0656: 1, H0575: 1, H0644: 1, H0015: 1, H0644: 1, H0413: 1, L0770: 1, L0662: 1, L0803: 1, L0662: 1, L0790: 1, L0659: 1, L0739: 1, H0521: 1, L0740: 1, L0745: 1, L0740: 1, L0755: 1, H0445: 1, S0026: 1, H0445: 1, S0026: 1,	AR061: 1, AR089: 1 L0439: 5, H0529: 3, L0759: 3, S0360: 2, H0024: 2, L0766: 2, L0804: 2, L0779: 2,
*		Phe-22 to Thr-27, Lys-71 to Arg-76, Ile-96 to Gly-102, Pro-121 to Trp-133.
	1396	1397
	1681 - 1226	1 - 519
	496	497
	951370	951371
	HISAF41	HDPJH11
	486	487

-									\neg															
														_										
		-8-											•			-				- 8				
															=									
			· · · · · ·																					
L0362: 2, H0556: 1, H0656: 1, H0575: 1, H0544: 1, H0015: 1,		<u>_</u>	.0655: 1, L0659: 1,	آب ۽		C0740: 1, L0745: 1,	.0777: 1, L0755: 1,		H0665: 1 and S0242: 1.	AR061: 2, AR089: 1	L0439: 5, H0529: 3,	J0759: 3, S0360: 2,	H0024: 2, L0766: 2,	.0803: 2, L0804: 2,	L0779: 2, L0362: 2,	H0556: 1, H0656: 1,	H0575: 1, H0544: 1,	H0015: 1, H0616: 1,	H0551: 1, H0412: 1,	H0413: 1, L0770: 1,	L0662: 1, L0805: 1,	L0655: 1, L0659: 1,	L0790: 1, L0665: 1,	H0547: 1, H0658: 1,
	I H H	고고	35	ÍĔ	Ħ	7	끕	Ħ	Ħ	₹		걸	Ĭ	끕	<u>고</u>	Ħ	Ĭ	Ĭ	耳	Ĭ	ŭ	걸	ĭ	Ĭ
¢				*		-	*	-		Lys-18 to Ile-23.							•							,
										1398												•		
		**				a		•		460 - 218														
		•								498														
-										950792														
		,								HLHCP93														
·						•				488													٠	

							-		•	- 1-1-1-	-				•		- i -			-i						
				147730	:										÷.								٠.			
	1				10.0		,							,				•								
<u> </u>		4		10p15	1 20			- ()		,	0	•	-				·				 	,				
H0539: 1, H0521: 1, L0740: 1, L0745: 1,	L0///: 1, L0/55: 1, H0445: 1, S0026: 1,	H0665: 1 and S0242: 1.		AR089: 3, AR061: 3 L0766: 8, L0803: 8,	H0046: 7, L0740: 7,	L0752: 7, L0754: 6,	H0318: 5, H0038: 5,	H0551: 5, L0659: 5,	S0152: 5, H0624: 4,	L0471: 4, S0003: 4,	L0666: 4, L0747: 4,	L0756: 4, H0422: 4,	H0556: 3, S0360: 3,	S0045: 3, H0586: 3,	H0486: 3, H0590: 3,	H0581: 3, H0628: 3,	3,	L0657: 3, L0809: 3,	L0790: 3, L0663: 3,	L0664: 3, L0665: 3,	H0520: 3, H0658: 3,	L0439: 3, L0779: 3,	L0777: 3, S0026: 3,	H0265: 2, H0657: 2,	S0212: 2, H0661: 2,	S0418: 2, S0376: 2,
	·		Lys-10 to Gln-20.																			:		*		
			1776	1399									-			, ,										
			175 - 717	215 - 796				•					ì													
			876	499					,						•		*					*101				
			951372	951671	-									,		•		- 071	****		نفي بيث	•			-	
		0	, a	HAIBC14		•															,		•	*		
				489		<u> </u>			1.				•													

				· .																				.		· .,				_
																						•								
	<u>.</u>															· -					1				_					_
2,	ત્	۲,	2,	4	ر ر	ર્વ	2,	2,	2,	7,	2,	1,	1,	ť	1,		Ļ	1,	: 1,		ť	: 1,	Ę,	. 1,	,	Ę.	7	. 1,	j,	: 1,
0266	032:	0163	598:	L0646: 2,	L0805: 2,	L0655: 2,	6890	0648	L0731: 2,	H0445: 2,	L0601:	S0040:	S0134:	341:	354:	, S0132:	S0278:	I, S0222:	H0601:	0250	H0575:	, H0596:	H0150:	H0050:	S0250:	H0615:	L0483:	0169	3090	0616
H0014: 2, H0266: 2,	S0214: 2, H0032: 2,	H0068: 2, H0163: 2,	H0040: 2, L0598: 2,	2, I.C	<u>ر</u>	ດົ	H0519: 2, H0689: 2,	10660: 2, H0648:	તં	م	ผ์	ัผ์		S0116: 1, H0341:	H0638: 1, S0354:	Ţ,	£,		1, H	H0587: 1, H0250:		<u> </u>	Ξ,	_		ı,	1,1	H0553: 1, H0169:	S0036: 1, H0090: 1	H0591: 1, H0616:
014:	214:	.890	040	,0520:	.0771:	.0776:	519:	999	H0478:	,0758:	L0595:	S0242:	S0402:	116:	638:	S0408:	H0619:	H0550:	H0431:	587:	.0021:	H0251:	ro110:	H0123:	H0267:	H0328:	H0428: 1,)553:	036:	591:
邑	80	Ħ	Ħ	ដ	ם	ដ	耳	耳	畄	김	ם	SO	80	80	Ħ	S	Ĭ.	Ħ	Ħ	茧	끕	茁	된	茁	Ħ	Ħ	Ħ	Ħ	<u>8</u>	H
									•																					
																										•				
						,																								
	•																													
			-			,															•						-			
一			19									-								 -				•						
L			,									<u></u>													ţ.					
																•										4				
L	•																													
																									,					
-																		-												
\vdash	-						,																	_			_			_
																													•	

H0413: 1, H0056: 1, T0041: 1, T0042: 1, B0494: 1, S0150: 1, S0210: 1, H0529: 1, L0640: 1, L0638: 1, L0769: 1, L0641: 1, L0773: 1, L0521: 1, L0650: 1, L0774: 1, L0650: 1, L0676: 1, L0650: 1, L0678: 1, L0634: 1, L0636: 1, L0634: 1, L0636: 1, L0783: 1, L0647: 1, L0789: 1, L0791: 1, H0144: 1, H0698: 1, L0789: 1, L0791: 1, H0518: 1, H0631: 1, H055: 1, H0631: 1, S0432: 1, S0228: 1, L0744: 1, L0753: 1, L0789: 1, L0753: 1, L0789: 1, L0753: 1, L0789: 1, L0753: 1, L0789: 1, L0362: 1,	· · ·	AR089: 1, AR061: 1 S0354: 1, S0358: 1, T0039: 1, H0263: 1,
×		Gly-8 to Phe-18, His-26 to Phe-41, Glu-56 to Gly-62,
*		1400
		3 - 827
	,	500
		951676
		HKAJZ24
		490

					,				<u></u> ,	·						,									,			
8																					•							
								•																•	•			
									Ŷ) =-								
H0494: 1 and S0440: 1.	30		AR089: 11, AR061: 3	L0748: 3, H0549: 2,	H0144: 2, L0021: 1,	H0618: 1, H0318: 1,	H0581: 1, H0239: 1,	H0510: 1, H0264: 1,	L0779: 1, L0758: 1,	L0596: 1 and S0106: 1.	AR089: 3, AR061: 1	L0517: 6, L0751: 6,	H0370: 4, L0764: 3,	L0666: 3, S0007: 2,	L0769: 2, L0646: 2,	L0664: 2, H0520: 2,	H0484: 1, H0483: 1,	S0046: 1, H0644: 1,	S0036: 1, H0494: 1,	S0440: 1, H0538: 1,	L0770: 1, L0772: 1,	L0773: 1, L0803: 1,	L0657: 1, L0659: 1,	L0809: 1, H0690: 1,	H0684: 1, H0660: 1,	H0627: 1, S0027: 1,	L0755: 1 and H0707: 1.	AR089: 0, AR061: 0
	Asn-198 to Ser-203, Asn-234 to Ile-242,	Glu-264 to Pro-270.	Arg-15 to Asp-21,	Arg-59 to Gly-66,	Ile-69 to Glu-74,	Lys-82 to Tyr-87,	Met-95 to Asp-100,	Lys-163 to Arg-171.		•	Ser-50 to Pro-62,	Ala-112 to Ser-125.											•				•	Gly-27 to Gly-38,
			1401					,			1402						=							•				1403
			2 - 514								3 - 812										•							701 - 15
			501								502									-		-						503
			951731								952058					·				<u> </u>								952124
ť			HWADY95			-					HCHAG27			•		•												HPCRA07
			491								492																	493

		,	
	AR089: 6, AR061: 3 S0026: 2, H0638: 1, H0486: 1, H0318: 1, S0214: 1, H0494: 1, T0041: 1, H0494: 1, L0520: 1, L0646: 1, L0666: 1, H0144: 1, S0374: 1, S0146: 1, L0750: 1 and L0485: 1.	AR061: 3, AR089: 3 H0656: 1, H0038: 1, S0210: 1, H0134: 1, H0445: 1 and L0485: 1.	AR089: 1, AR061: 1 L0766: 7, L0756: 5, H0521: 3, L0777: 3, S0007: 2, H0413: 2, L0761: 2, L0771: 2, L0761: 2, L0771: 2, L0666: 2, L0748: 2, L0751: 2, H0306: 1, H0402: 1, S0354: 1, S0278: 1, H0441: 1, H0455: 1, H0587: 1, H0486: 1, H0427: 1, H0599: 1, H0691: 1,
Thr-67 to Arg-72, Val-87 to Ser-98, Glu-170 to Gly-176, Lys-190 to Asp-200.	Arg-6 to Glu-12, Tyr-30 to Thr-35, Val-42 to His-52.	Ala-1 to Ser-7, Gln-31 to Leu-46, Arg-49 to Glu-55, Tyr-73 to Asp-79.	Ala-8 to Pro-23, Ala-25 to Pro-30, Arg-46 to Glu-53.
	1404	1405	1406
	1283 - 219	. 3 - 473	16 - 1005
·	504	505	506
	952729	952730	953295
·	HDMAF23	HRGBU12	HADFD82
	494	495	496

Г		, _	-,	-0									_																\neg
																,					-								
r			•		-	ī									<u></u> -			•					•			÷			
						-							,																
			_							and		. 7	^				,												
17:1	53: 1.	6: 1,	74: 1,	51: 1,	55: 1,	53: 1,	33: 1 ,	36: 1	17:1,	L0366: 1 and		AR089: 15, AR061:	L0747: 6, L0749: 6,	75:5,	58: 4,	31:3,	9:3,	1:2,	42: 2,	74: 2,	18:2,	56: 2,	58: 2,	56: 1	49: 1	51:1	55: 1	32: 1	90: 1
H0024-1 H0617-	L0763:	L0646:	L0774:	L0651:	L0655:	L0663:	, H0593:	, H0436:	, L0747: 1,	L036		15, A	5, 1.07	.0766: 5, L0775: 5,	H0547: 5, L0758: 4,	S0358: 3, H0031:		L0471:	, T0042:	L0774:	L0748:	L0756:	H0668: 2	, H0556:	H0449:	H0351:	, H0455:	, Н0632:	. Н0590:
74.1	H0040: 1		.0650: 1,	75: 1,	,0806: 1,	59: 1,	_		_	$\overline{}$	H0543: 1	.68	747: (56: 5,	47:5	58: 3,	.0744: 3,	S0046: 2,	H0616: 2	.0764: 2,	,0659: 2,	,0740: 2,	.0779: 2,	24: 1	61:1	25: 1	H0614: 1	H0438: 1	86: 1
HOH	HOOH	107	106	L0775:	108	L0659:	106 106	H0684:	100	107	H05	ARC	Š	107	H05	S03;	L07	200 <u>S</u>	90H	1.07	106	102	107	H0624:	H0661:	H0125:)H06	H04	H0486:
															٠				٠										
																							•					٠	
																							٠						
			-	•								1407													are.				
-			-	<u>·</u>	-	-		**	7.5		·	-		_	_					-							_		
												1 - 636									٠								
\vdash						*			•	-		7			-		_		_			ı	=						
												507																	
					•					-		954048																	
												1										8					· <u>-</u>		
				-					٠			HCGAF54																	
		•				-						497		,															

T0048: 1, L0563: 1, H0421: 1, H0596: 1, H0546: 1, H0545: 1, H0046: 1, H0545: 1, S0051: 1, H0510: 1, S0028: 1, H0286: 1, S0334: 1, H0286: 1, S0344: 1, H0591: 1, H0561: 1, S0144: 1, L0776: 1, L0650: 1, L0776: 1, L0657: 1, L0666: 1, L0657: 1, H0666: 1, H0539: 1, S0374: 1, H0689: 1, H0666: 1, H0518: 1, S0374: 1, H0518: 1, S0380: 1, H0518: 1, H0555: 1, L0752: 1, L0439: 1, L0752: 1, L0755: 1, L0757: 1,	آس کس	AR054: 12, AR061: 2, AR089: 2, AR051: 1 H0381: 1, H0255: 1, S0052: 1 and S0028: 1.
	LO: H10	Asp-5 to Lys-13, AR Gly-107 to Cys-113, AR Thr-125 to Leu-131, Hi Lys-146 to Asp-155, S00
		1408
		1010 - 1654
		508
		610031
		HSLGA19
		498